



Volume 58
Number 3
Winter 2021
Editor: ./Steven Toaddy

[Advertising](#) | [Back Issues & Archives](#) | [TIP Policies](#) | [Board](#) | [Complete PDF](#)

EDITORIAL

[Editor's Column: This Is Actually Kind of Nice](#)

./Steven Toaddy

FEATURES

For All Readers

[President's Column: State of SIOP](#)

Georgia Chao

For Graduate Students

[TIPTopics: Allyship as a Sustained Practice in Graduate School](#) Andrew Tenbrink, Mallory Smith, Georgia LaMarre, Laura Pineault, Tyleen Lopez, & Molly Christophersen

For Practitioners

[Technical Report: Impact of COVID-19 and Human Resource Management Agility Practices](#) Emily D. Campion, Susan Zhu, Michael A. Campion, & Alexander Alonso

For Academics

[Max. Classroom Capacity: On Robo-Grading](#)

Loren J. Naidoo

Inside SIOP

[Foundation Spotlight: Welcome to the Brave New Normal](#)

Milton D. Hake

REPORTS

[Culture-Infused Industrial and Organizational Psychology](#)

Sharon Glazer and Krystal N. Roach with Reeshad Dalal, Laura Dryjanska, Andrei Ion, Catherine T. Kwantes, Rana Moukarzel, D.J. O'Donnell, & Chet Robie

[SIOP Award Winners: Meet the Winners of the 2020 William A. Owens Scholarly Achievement Award who Share Insight on "What Is Work-Life Balance Anyway?"](#) Liberty J. Munson

[SIOP Award Winners: Meet the Winner of 2020 Early Career Award in Practice-Juliet Renee Aiken](#) Liberty J. Munson

[Laissez Le Bon Temps Rouler! Attend SIOP's Virtual Consortia Events!](#) SIOP Consortia Committee
[The SIOP Annual Conference: Looking Back, Looking Forward](#)
Whitney Botsford Morgan, Anthony Boyce, MQ Liu, Amanda Drescher, & Emily Solberg

[10 Fun Facts About SIOP's Members From 2020!](#)

Victoria Lykins

[Blacks in I/O](#) David Geller, Anna Erickson, and Denis Ochieng

[Is That Ethical? The Current State of Industrial-Organizational Psychology Graduate Training in Ethics](#)
Rebecca M. Brossoit, Jacqueline R. Wong, Faviola Robles-Saenz, Larissa K. Barber, Tammy D. Allen, &
Thomas W. Britt

[Opening Up: Small Wins in Open Science: Things You Can Do Today to Improve Research in I-O Psychology](#) Christopher M. Castille, Frederick L. Oswald, George Banks, & Larry Williams

[Update From Washington: 2020 Election Fallout](#) Bill Ruch
[Experts Insights on I-O's Best-Kept Career Secret: A Two-Part Reflection on Postdoctoral Work](#) Chelsea
LeNoble, Danielle Wald, & Dana C. Verhoeven

[The Bridge: Connecting Science and Practice](#) Kimberly Adams, Stephanie Zajac, & Tara Myers

[Beyond Organizations: Contributing to COVID-19 on a Larger Stage](#) Sylvia J. Hysong

[Supporting Caregivers at the SIOP Conference](#) Vanessa A. Gaskins, Drake Van Egdom, Kristl Davison,
Vipanchi Mishra, Samantha Chau, Rebecca Thompson, Jacquelyn Brady, Jenna Filipkowski, & Alexandra Zelin

[New Alliance for Organizational Psychology \(AOP\) White Paper](#)

[Making I-O Visible: Applying Design Thinking to Grassroots Visibility Efforts](#) Sevelyn J. VanRonk,
Gordon B. Schmidt, Amelia C. Do, Shavonne U. Holman, Macy E. Cheeks, Sayeed Islam, Lisa M. Kath, &
William P. Jimenez

[Meet the SIOP Administrative Office Staff](#)

[Members in the Media](#) Amber Stark

[Membership Milestones](#) Jayne Tegge

[IOtas](#) Jen Baker



Editor's Column: This Is Actually Kind of Nice

./Steven Toaddy



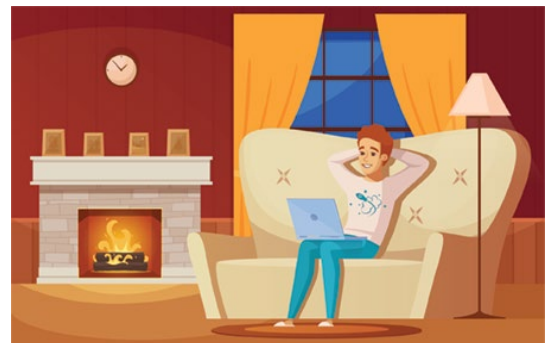
So you're telling me that I don't have to commute to work, I can transition from running a meeting to walking the dog in seconds flat (or can just combine the two), I can wear comfortable clothing all day every day, and that not only will the infrastructure for doing these things that I'd have preferred to have done in the first place be supported but that these practices themselves will be normalized, encouraged, *appreciated*? Sign me up! I was already signed up? Cool! I can't go back to the workplace even if I want to? Oh. Cool!

It's from a position of great privilege that I get to write these words, of course, and I'm confident that your mileage varies regarding the above even if you have managed to remain steadily employed and healthy, and, in general, impacted by the whole event only by an uptick in hand washing and a great deal of worry. Even I missed not being able to see people at Annual. My wanderlust is not sated. The magnitude of human suffering and death that has led to this event and that continues to, if I may say it, plague the species is beyond my ability to comprehend. I'm embarrassed at the degree to which my country has reacted to this crisis.

But! My work has been transformed, and I kind of like it. According to [one of the pieces in this issue](#) (and find an audio recording of the same here), so do some other folks. Maybe we can keep some of this up after the crisis. Maybe we can rethink this whole adult-life thing. Many of you have been for ages, but maybe the whole of human civilization can now.

Of course, perhaps this arrangement is unsustainable; perhaps we don't function well this way. I salute those who are doing the research to start to determine that. On the *TIP* and the SIOP front, it seems that folks are pluggin' away. I encourage you to take a [look at](#) or a [listen to](#) our [president's piece](#); it was helpful to think more broadly about what SIOP did, does, and will continue to do. I think that you'll be inspired by reactions to the pandemic from, for example, Blacks in I/O (see some description of those reactions here). The [Foundation piece](#) (listen here) is, hmm, full of pathos and is provocative, and I appreciate it.

I am impressed at the number of submissions that I received from the disrupted membership of SIOP; there is, yet again, a great deal of thought-provoking and inspiring work in the pages of *TIP* this issue, I think. I encourage you to use it to keep yourself invested in and involved with SIOP, to maintain that professional identity even when we aren't shaking hands with or perhaps even interacting with our colleagues. We'll need your work when we come out of this, and we need your work now—but perhaps you'll be able to do it from your couch in those old, comfy slippers.



President's Column: State of SIOP

Georgia Chao, SIOP President

I hope this column finds you safe and healthy. The pandemic, economic recession, and racial tensions continue to challenge our world. However, SIOP continues to work on behalf of our members to advance the field of I-O psychology, which is more relevant than ever in this changed world of work. Last month, a short video on the state of SIOP was sent to members. There is good news and bad news.

First, the bad news—SIOP is losing money due to the pandemic's impact on our meetings. Much of our revenue comes from registration and sponsorship fees from these meetings. Our fiscal year ending June 30, 2020, resulted in a \$58,000 loss, and we are operating with about a million-dollar deficit this year. The losses could have been far greater, but the Executive Board and Administrative Office continue to work hard to minimize them.

Despite this financial challenge, we are cautiously optimistic for this new year. We don't know how the pandemic or vaccine plans may affect life in 2021. Our 2021 annual conference is currently planned as a hybrid conference with in-person sessions as well as live video sessions and on-demand programming. We are monitoring the pandemic and hotel conditions to ensure that anyone who will be in New Orleans for the conference will be safe. That is our top priority. Final decisions for the conference format will be made in February.

Moving forward, there is good news that SIOP has been active on a number of fronts. We are much more than an annual conference! SIOP is structured with 9 portfolios, 42 committees, and many, many subcommittees, ad hoc committees, and task forces. We are fortunate to have about 1,000 volunteers working on SIOP's behalf. To highlight some of our work within the past year, we have

- Promoted I-O psychology to external audiences:
 - We're working to help the federal government understand how I-O psychology can help improve aspects of (a) defense and security, (b) education and training, (c) health and well-being, and (d) diversity and inclusion. These are all nonpartisan issues that focus on our science and on evidence-based practices.
 - We have partnered with other organizations, like SHRM and APA's military psychology division, to help veterans transition to the workforce.
 - SIOP is a nongovernmental organization with special consultative status with the United Nations. We work to include I-O topics in the UN's Global Compact's Sustainable Development Goals—particularly as they pertain to decent work.
 - The Education & Training Committee's Bridge Builders initiative continues to introduce I-O psychology to high school students and undergraduates.
- With a more internal focus, we continue to offer benefits for our members:
 - We issued an anti-racism statement and worked with the SIOP Foundation to fund several research projects with an Anti-Racism Grant initiative, with another round of grantmaking coming up soon.
 - Several committees offer virtual mentoring programs for practitioners, ethnic/minority groups, and women.

- Our website has new resources for communities interested in ethics, future of work, LBGTQIA+, and getting more I-O content into general introductory psychology textbooks.
 - We have published several volumes in the Organizational Frontiers and Professional Practice series with several other volumes in planning and production stages.
 - *TIP* and the *IOP* journal continue to update members on SIOP and cutting-edge issues.
 - The three virtual workshops that were conducted this fall were successful and helped members receive CE credits.
 - We are designing implementation plans for our new anti-harassment policy to help ensure that our members are in a safe and professional environment.
- Finally, for SIOP to continue to thrive as the preeminent professional organization for I-O psychology
 - The Executive Board has developed a new 3-year strategic plan, and we are working on specific actions to help SIOP achieve its goals.
 - The Support, Planning, and Research Committee (SPARC) and the Executive Board are developing new ideas to generate revenue for the Society while delivering value to members and those who benefit from I-O science and practice.

These activities only highlight some of SIOP's work. Much has been done, and much remains to move forward. Whatever the "new normal" may be in the future, all of SIOP's elected officers, committee chairs, volunteers, and staff are working hard to serve our profession and membership. I'd like to take this time to send BIG thank-yous to all of you who support SIOP!

For 2021, I wish you good health and well-being. I'm confident that together, we will MOVE FORWARD!

TIPTopics: Allyship as a Sustained Practice in Graduate School

Andrew Tenbrink, Mallory Smith, Georgia LaMarre, Laura Pineault, Tyleen Lopez, & Molly Christophersen
Wayne State University

"You have to act as if it were possible to radically transform the world. And you have to do it all the time."--Angela Davis

The zeitgeist of 2020 could be characterized by a heightened awareness of the ways that individuals, organizations, and societal structures interact and impact the world around them. Long-standing social inequalities (Acker, 2006) at the intersection of race, gender, and social class have been heavy topics of public discourse in response to police brutality and racial injustice against Black people (SIOP, 2020). The compounding effects of the COVID-19 pandemic on low-income communities underscores the structural disadvantages that still exist in society today (Center for Disease Control, 2020; Kochhar, 2020). This convergence of factors has spurred a "social awakening" (Suyemoto et al., 2020, p. 2) and has activated a sense of urgency to combat all forms of institutionalized discrimination along the lines of race, class, gender, sexuality, and other social locations (e.g., Bonilla-Silva, 2017).

In light of this "social awakening," we have observed numerous examples across industries to promote diversity, equity, and inclusion. Part of this includes individuals practicing critical allyship—engaging in a cyclic praxis of reflecting on one's own privilege, seeking resources to learn about systems of power, privilege, and oppression, and acting in solidarity with marginalized individuals (whether they be in one's in-group or out-group). The important role of allyship in supporting and advocating for specific marginalized groups is well documented in the I-O literature (e.g., Cheng et al., 2018; Creary, 2020; Thoroughgood et al., 2020). In fact, content generated on the topic of allyship has surged in recent months.

Here, we build off those discussions to highlight everyday allyship behaviors that graduate students can engage in and that cut across demographic lines. We acknowledge that this more general approach can erase the unique allyship behaviors that are crucial for specific marginalized groups; however, we aim to establish a foundation for understanding and building allyship in graduate school and beyond. We encourage our readers to continue to educate themselves on the unique challenges that different marginalized individuals face and how to most effectively support and advocate for them.

What Is Allyship?

Early writers such as Evans and Wall (1991) and Ayzajian (1995) defined the word "allies" as people in privileged positions who take action to challenge or undermine the systems of privilege from which they benefit. Modern definitions of allyship echo these core themes. However, some scholars and, even more so, activists have called to phase out self-labelling terminology such as "ally" or "allies," criticizing their use as mere labels that individuals adopt for themselves without embodying the crux of the definition: taking action (Carlson et al., 2019). That is, there is a push to conceptualize allyship as a verb, not a noun. As Mia McKenzie, editor-in-chief of the activism blog *Black Girl Dangerous*, writes:

Ally cannot be a label that someone stamps onto you—or, god forbid, that you stamp on to yourself—so you can then go around claiming it as some kind of identity. It's not an identity. It's an active thing that must be done over and over and over again, in the largest and smallest ways, every day.

It is important to note that we are *all* called to this work. We are not invariably dichotomized as “privileged and powerful” or “marginalized and oppressed,” just as we are not defined by one aspect of our identity. Rather, we are collective beings with multiple identities, some oppressed, some privileged. For example, as graduate students with access to higher education, we have a shared power and privilege that others do not have (Gómez, 2019). In each moment that we find ourselves in a position of power, we are accountable for being proactive and acting in solidarity with those on the other side of the coin (see Nixon, 2019 for more information on the coin model and the intersecting nature of the coins). We advance this thinking here by conceptualizing allyship as an active practice guided by three recursive and iterative steps: self-examination and critical thinking, awareness and education, and action.

Step 1: Self-Examination and Critical Thinking

The first step requires a self-examination of your own identities and privileges, which includes taking inventory of how you benefit from the privileges at the cost of oppressing others. Try this activity to explore your own social identity, and learn more about the history of privilege and oppression in American society here. These exercises may give rise to guilt, discomfort, anger, and shame. Sit with these feelings, and then move through them, as they can be paralyzing and self-indulgent in nature (Carlson et al., 2019, p. 5). During this self-examination, those pursuant of allyship are encouraged to remain mindful and reflective of their intentions, as well as their impact, when supporting and advocating for specific individuals in their lives (Cheng et al., 2019). For example, Edwards (2006) describes the different intentions allies can embody, demonstrating the importance of engaging in allyship for social justice (and not self-interest or altruism):

- Individuals engaging in **allyship for self-interest** tend to only confront oppressive behavior when someone they care about is being targeted.
- Individuals engaging in **allyship for altruism** normally act out of guilt and place blame on individuals of the majority group rather than recognizing their own participation in the system of oppression. Despite having positive intentions, acting out of altruism often leads individuals to speak *for* the oppressed as opposed to *with* them.
- Individuals engaging in **allyship for social justice** commit to and work *with* oppressed communities to advance that community and dismantle systemic oppression. They take purposeful and deliberate action to accept their privilege, work toward liberating the oppressed and themselves, and recognize how interconnected different forms of oppression are and the limitations of only working to address one form of oppression at a time.

Step 2: Awareness and Education

An essential next step in allyship is educating oneself through listening and learning. A recent systematic review of the allyship literature aptly coins this step, “Listen + Shut Up + Learn” (Carlson et al., 2019). You can find publicly available workshops and materials, such as Cornell University’s upcoming Building Allyship Series and the Academy of Management Social Issues in Management Division’s Racial Justice at the Intersection of Business and Society panel series. Another avenue to educate oneself is by seeking out both academic and nonacademic writing and media on this topic, acknowledging that systemic forces can gatekeep minority perspectives from scholarly journals and from academia more generally (Fotaki, 2013; Ray, 2019). Some examples of resources are

- Podcasts addressing intersectional issues of race, gender, and social class, such as Code Switch, Do the Work, Intersectionality Matters, and Yo, Is This Racist?

- Journals outside of the top-tier I-O outlets, such as the recent issues in the *Journal of Social Issues* on [ableism](#) and in *Equality, Diversity and Inclusion's Special Issue: Black Lives Matter: Black Community Voices*.
- Community-based resources, such as [A Progressive Style Guide](#) from Sum of Us, to language in support of intersectionality and cross-sector power building to Dr. Jennifer M. Gómez's (2020) compilation of resources for [correcting bias in tenure and promotion](#) and [addressing anti-Black racism](#) in academia and beyond.

Step 3: Action

Along with self-reflection and education, which are crucial aspects of allyship, it is even more important to transfer this awareness and learning into action. Contemporary I-O scholarship categorizes ally behaviors into support and advocacy (e.g., [Brown & Ostrove, 2013](#); [Cheng et al., 2019](#); [Gardner et al., 2020](#)):

- **Support:** Ally support provides psychological and/or tangible resources for individuals with stigmatized identities. Support behaviors help minoritized persons feel valued and engaged rather than marginalized and psychologically exhausted (see self-verification theory; [Swann, 2012](#)). Example behaviors include being present and listening to the unique struggles faced by individuals, participating in ally trainings, attending educational or social events held by marginalized groups, and receiving disclosures of invisible identities, such as sexual orientation, religious affiliation, and disability status, with acceptance and understanding ([DiStefano et al., 2000](#); [Law et al., 2011](#)).
- **Advocacy:** Ally advocacy involves more outward and proactive support, such as directly confronting instances of prejudice or discrimination, educating peers, calling for better organizational policies and resources that support stigmatized groups, and actively engaging in advocacy organizations (e.g., [Czopp & Monteith, 2003](#)). One form of daily advocacy is amplifying marginalized voices ([Carlson et al., 2019](#)). For example,
 - When a peer offers a great idea in class, highlight it and give them credit. Validate their perspectives in the moment during class or group meetings instead of waiting until afterward to tell them one-on-one.
 - Speak up if you hear or see discriminatory behavior, even if this risks your personal interests. Let a professor know when a reading they have assigned or an assignment prompt is not appropriate or even harmful to a marginalized group. Correct a classmate who makes comments that are discriminatory. It is not always easy to identify discrimination when it happens (see the confronting prejudiced responses model; [Ashburn-Nardo et al., 2008](#)), but it is important to bring attention to and to challenge these behaviors when possible.

Unique Opportunities for Advocacy and Support in Our Graduate Student Roles

As graduate students, we dynamically shift from being students to researchers to instructors on a day-to-day basis. In the sections below, we highlight unique opportunities to engage in allyship in each of these roles and, in doing so, acknowledge what we as graduate students can do to promote diversity, inclusion, and equity in academia and beyond ([Liu et al., 2020](#)).

As researchers, we can challenge ourselves and each other to be intentional about *who we read*, *who we cite*, *the language we use in writing*, and *the populations we study in research*. There are opportunities to learn from and to incorporate the brilliant theoretical and empirical work of marginalized scholars at each stage of the research process ([Roberts et al., 2020](#)).

- **Literature search.** Intentionally seek out and read work by scholars with marginalized identities. Putting this work on your radar increases the likelihood of citing and amplifying these voices, as well as being informed by perspectives that are commonly left out of academic research and discussions.
- **Literature review.** Take inventory of the representation of scholars cited in your published and unpublished work. Are they mainly men? White? Western centric? Are you only citing the most “popular,” heavily cited work on a topic, or are you also integrating the perspectives and voices of those who are often gatekept from our top-tier journals (King et al., 2018)? To hold yourself accountable, we encourage you to participate in [citation practice challenges](#) and other related efforts (e.g., [#CiteASista](#)). Going deeper, take time to understand the history and background of the people we commonly cite. Many of the scholars that we commonly cite or were foundational scholars were racist, were homophobic, supported eugenics, and so on. If we continue to heavily rely on these scholars’ work, it is critical that we also acknowledge the problematic aspects of these individuals (and also how that might inform how we interpret their work). I-O in particular has many things that we can highlight in our history and practices that are problematic (e.g., testing and assessment; see [Testing and Assessment With Persons and Communities of Color](#)).
- **Designing and conducting research.** Seek out marginalized, minoritized, and underrepresented samples—combatting the WEIRD (Western, educated, industrialized, rich, democratic; Henrich et al., 2010) and white-collar (Diaz & Bergman, 2013) samples dominating I-O psychology. If homogeneity is inherent in your samples, take time to acknowledge the limitations and bias introduced rather than making sweeping, generalized claims about the theoretical and practical implications.
- **Analyzing and writing up results.** Intentionally use inclusive, respectful language (see [Bergman, 2019](#)) and consider incorporating forms of reflexivity into your quantitative research process (see [Ryan & Golden, 2006](#)). We also echo recent calls to test and report the presence or absence of demographic effects, even if noncentral to your research question(s) (see the [Avery & Volpone, 2020](#) chapter, “The Perils of Ignoring Demographic Differences on Micro Organizational Research”).

Central here is that these small, nonperformative, and individual efforts, when taken in the collective, have the potential to resoundingly dismantle pervasive systems and practices of oppression in the academy.

As instructors, we hold [positional power](#) that can catalyze allyship effectiveness if yielded appropriately ([Cheng et al., 2019](#)). Allyship for educators is unique depending on one’s identity, experience, and familiarity with social justice issues ([Brown & Ostrove, 2013](#)). However, there are many actions that educators can take in the classroom to recognize oppression, to support those experiencing oppression, and to ensure that oppression is not perpetuated in their classes. For example, educators may make time to discuss social injustices and to encourage dialogue and understanding among students. Further, educators can allow students to contribute to the conversation with the perspectives of their own identity-group memberships while being cautious not to tokenize minoritized students by asking them to speak for their entire identity group.

Incorporating [Culturally Sustaining Pedagogy](#) (CSP) into your classrooms (e.g., [Paris, 2012](#)) is one concrete way to build students’ skills and knowledge for engaging in allyship. For guidance here, we recommend the work of Dr. Django Paris, who has dedicated his career to bringing educational and cultural justice to inquiry and pedagogy through CSP. This type of pedagogy challenges the standard, white-washed American education by incorporating the voices and cultures of other groups ([Django & Alim, 2017](#)).

Many instructors are also taking action by diversifying their syllabi, incorporating the great work of marginalized scholars that are often excluded from psychology courses. For inspiration on how to increase representation throughout curricula ([Thomas & Ashburn-Nardo, 2020](#)), see [Dr. Erica Hsiung Wojcik’s BI-POC-Authored Psychology Papers](#) spreadsheet intended for use by instructors of undergradu-

ate/graduate-level psychology courses to help diversify their syllabi, as well as the syllabus of Dr. Jin Goh's [Seminar on the Social Psychology of Race and Racism](#). Although the journey to allyship within an academic setting may feel daunting, it is imperative to make these efforts in order to ensure that our students are well-informed and equipped to prevent the further perpetuation of discrimination, harm, and inequity—both inside and outside of the classroom.

Our Limitations and Your Allyship Journey

We acknowledge that our authorship team lacks representation on certain dimensions of diversity (Reyes, 2018). Several systemic forces may have shaped the composition of our team (predominantly White, female, heterosexual, advanced degree holders, etc.), such as systemic discrimination related to opportunities to be an author (King et al., 2018), graduate school admittance (APA, 2020), and tendencies to write with the in-group of known others rather than seeking out underrepresented minoritized students. We disclose our positionality here to fully acknowledge how our authorship team's composition may have biased and influenced this narrative, as well as to role model the first step to engaging in allyship: critical self-reflection.

See below for additional readings to get you started on or to catalyze your allyship journey:

1. ["What's in a Name? A Synthesis of "Allyship" Elements From Academic and Activist Literature"](#)
2. ["Beyond Allyship: Motivations for Advantaged Group Members to Engage in Action for Disadvantaged Groups"](#)
3. ["Whiteness in Organizations: From White Supremacy to Allyship"](#)
4. ["Intersecting Viruses: A Clarion Call for a New Direction in Diversity Theorizing"](#)

Reflecting on our team's limitations, we reemphasize that the resources we provided are not exhaustive, especially when it comes to the unique perspectives, challenges, and needs of specific groups. So, please do NOT stop here. Modeling the second step to engaging in allyship behaviors, we are each in the process of building our awareness and education, and this article is limited to our current knowledge and experiences.

We as graduate students—and as the future of academia—have unique opportunities to elicit sustained change that go beyond interpersonal or momentary acts of social activism. Allyship is not new, nor would it be reasonable for it to be treated as a trend spurred on by the events of 2020. The effects of oppressive systems have been in place and have been compounding for generations. Individuals who are most impacted by this oppression are usually the ones who are fighting the hardest for change—often with little to no support. At various points in time, others may join in, spurred by a critical event, but their activism and advocacy are often only momentary. We can no longer accept this as the status quo. Sustained change demands more than momentary social activism. It requires critical reflection, personal ownership, and commitment to change our repeated, daily actions in ways that dismantle, rather than reproduce, systems of social inequity (Sumerau et al., 2020).

We believe that I-O graduate students are in a unique position to contribute to sustaining the momentum around allyship and activism through our future roles as academics and as organizational change makers. We have the ability and responsibility to strive toward more inclusivity and representation in higher education, research, SIOP, and all workplaces. We are pledging to incorporate this effort in our everyday lives, and we call on you to join us.

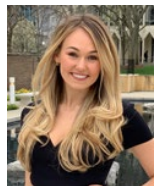
We extend our deepest gratitude and thanks to [Shannon Cheng](#), [Dr. Jennifer M. Gómez](#), and [Edward Scott](#) for their thoughtful review and invaluable contributions to this article.

Andrew Tenbrink is a 5th-year PhD student in I-O psychology. He received his BS in Psychology from Kansas State University. His research interests include selection, assessment, and performance management, with a specific focus on factors affecting the performance appraisal process. Currently, Andrew has a 1-year assistantship working as a quantitative methods consultant in the Department of Psychology's Research Design and Analysis Unit at Wayne State University. Andrew is expected to graduate in the summer of 2021. After earning his PhD, he would like to pursue a career in academia. andrewtenbrink@wayne.edu | @AndrewPTenbrink



Mallory Smith completed her Master of Arts in I-O Psychology in the spring of 2020. Prior to graduate school, she earned her BA in Psychology and German from Wayne State University. Her interests include factors influencing employee attitudes, efficacy, and perceptions of justice during organizational change. After graduation, Mallory started a new job in the healthcare industry, leveraging both her I-O skillset and background in information technology to support digital transformation, enhance work processes, and encourage employee adoption of new innovations. smithy@wayne.edu | @mallorycsmith

Georgia LaMarre is a 4th-year PhD student in I-O psychology. She completed her undergraduate education at the University of Waterloo before moving over the border to live in Michigan. Georgia is currently working as an organizational development intern at a consulting firm while pursuing research interests in team decision making, workplace identity, and paramilitary organizational culture. After graduate school, she hopes to apply her I-O knowledge to help solve problems in public-sector organizations. georgia.lamarre@wayne.edu



Laura Pineault is a 5th-year PhD candidate in I-O psychology. Her research interests lie at the intersection of leadership and work-life organizational culture, with emphasis on the impact of work-life organizational practices on the leadership success of women. Laura graduated with Distinction from the Honours Behaviour, Cognition and Neuroscience program at the University of Windsor in June 2016. Currently, Laura serves as the primary graduate research assistant for a NSF RAPID grant (Work, Family, and Social Well-Being Among Couples in the Context of COVID-19; NSF #2031726) and is a quantitative methods consultant for the Department of Psychology's Research Design and Analysis Unit at Wayne State University. Laura is expected to graduate in the spring of 2021. laura.pineault@wayne.edu | @LPineault

Tyleen Lopez is a 3rd-year PhD student in I-O psychology. She received her BA in Psychology from St. John's University in Queens, New York. Her research interests include diversity/inclusion, leadership, and well-being in the workplace. Tyleen is currently a graduate research assistant and lab manager for Dr. Lars U. Johnson's LeadWell Research lab at Wayne State University. Tyleen is expected to graduate in the spring of 2023. After earning her PhD, she would like to pursue a career in academia. tyleen.lopez@wayne.edu | @tyleenlopez



Molly Christophersen is pursuing a Master of Arts in I-O Psychology. She earned her BA in Sociology from Michigan State University in 2016. Her interests include workforce training and employee development. After graduate school, she has her sights set on an applied career in the private sector—ideally in a role where she can help businesses train and develop their employees, effectively helping individuals to grow within their organization. mollychristophersen@wayne.edu | @molly_kate32

Technical Report: Impact of COVID-19 and Human Resource Management Agility Practices

Emily D. Campion, Old Dominion University

Susan Zhu, University of Kentucky

Michael A. Campion, Purdue University

Alexander Alonso, Society for Human Resource Management

The COVID-19 pandemic forced many organizations in the United States to adapt in ways they never had to before. Organizational leaders across levels developed new strategies to pivot their use of human capital in this unprecedented context. For instance, leaders relied on their human resource departments to redeploy their onsite workforce to remote work or to modify how work was accomplished to maintain productivity. In this article, we present research on how organizations have implemented what we call *Human Resource Management Agility Practices* (HRMAP) in response to COVID-19. We also provide a snapshot of the extent to which COVID has disrupted organizational functions in our sample and also the efforts made by those in our sample to recover and return to work. Our hope is to inform *TIP* readers with actual data on the impact of COVID-19 (positive and negative) and discuss how implementing HRMAPs has helped organizations cope with the changes.

The Society of Human Resource Management (SHRM) sponsored the study, and SHRM members were recruited to participate in this study in exchange for continuing education credits. We conducted a pilot study between May and June of 2020, 2 months after the pandemic took root in the US ($N = 795$) to gather qualitative information on how organizations were responding to the pandemic across several HR functions (e.g., job assignments, compensation, benefits, EAPs). We content analyzed the responses and developed a measure of HRMAP to use in a four-wave longitudinal study. In what follows, we describe results from the first of the four waves, which was conducted in September 2020 ($N = 1,858$).

The sample included a range of HR jobs, industries, and sectors. A majority of participants were female (85.34%) and White (82.48%), and had spent an average of 15.1 years ($SD = 8.7$) in HR. About 60% occupied HR leadership positions (e.g., director, manager, vice president of HR). Nearly half (48.2%) of participants were in small organizations (499 employees or fewer).

We organized the findings into three topics beginning with the extent to which COVID-19 disrupted their organization. We then discuss the HRMAPs they implemented. Finally, we discuss their recovery and return-to-workplace processes.

Disruption From COVID

What percent of workers and processes were disrupted by COVID-19? On average, more than three-fourths of workers experienced some sort of major work changes, such as having to wear masks and social distance, and nearly 60% moved to remote work. About one-fourth of the workers had tasks that were meaningfully changed, and nearly 10% lost their jobs altogether. In all, more than one-third were negatively impacted in some way.

What percentage of workers in your (organization/unit) were terminated, (regardless of if the [organization/unit] intended to rehire them or not)?	9.6%
----------------------------------------------------------------------------------------------------------------------------------------------------	------

What percentage of workers in your (organization/unit) moved to remote work?	58.5%
What percentage of workers in your (organization/unit) experienced major work changes (e.g., must work with mask on, maintain social distancing at work, etc.)?	77.4%
What percentage of workings in your (organization/unit) had job tasks that were meaningfully changed?	28.3%
What percentage of the work processes in your (organization/unit) were negatively impacted in some way (e.g., work flow, supply chain, communication, coordination, etc.)?	37.0%

What was the impact of COVID-19 on employees? The HR managers felt that employee morale and engagement were down slightly, but willingness to cooperate with others and adaptability improved. The quality of relationships with coworkers and leadership did not appear to be influenced.

	Mean scores
Employee morale	2.6
Employee engagement	2.8
Employee willingness to cooperate with others	3.5
Employee adaptability	3.9
Quality of employee relationships with coworkers	3.1
Quality of employee relationships with their leadership	3.1
<i>Note.</i> Scale of measure is 1 = strongly decreased, 2 = slightly decreased, 3 = not changed, 4 = slightly increased, 5 = strongly increased.	

What was the impact of COVID-19 on product/service demand? More than three-fourths indicated a negative impact on the product/service demand and profitability. About one in six organizations were hugely impacted, and nearly another third reported a moderate impact. However, COVID did not uniformly impact all organizations: Some reported no impact, and 11.4% reported a *positive* impact where the demand for the products/services of a small number of companies *actually increased* due to the shutdown.

Huge negative impact (50% or more)	16.3%
Moderate negative impact (20–50%)	29.1%
Small negative impact (5–20%)	29.4%
No impact	13.8%
Positive impact	11.4%

Overall, what impact did COVID-19 have on the organizations? When asked to consider all things, about two-thirds reported a negative impact on their organizations, but about one-fifth reported a positive impact. Perhaps many anticipated that product/service demand would rebound or the crisis would be short lived, and they could survive it without a permanent loss.

A large negative impact	14.8%
A negative impact	50.3%
No impact	14.6%
A positive impact	17.7%
A large positive impact	2.5%

What was the productivity impact? Given the number of employees working from home and other influences on employee jobs, we asked what percentage of employees are more or less productive. To our

surprise, only about one-fifth reported that employees were less productive and one-fourth reported more productive. Although HR employees seem like good informants on this topic, the results are hard to believe given the impact on the business as reported in the above questions. Perhaps the HR informants were describing their perspective on employee time and effort rather than actual productivity. This is an important topic for future research.

Employees were much less productive than pre-COVID (March 2020)	3.3%
Employees were less productive than pre-COVID (March 2020)	15.2%
Employees were about as productive as pre-COVID (March 2020)	54.6%
Employees were more productive than pre-COVID (March 2020)	24.2%
Employees were much more productive than pre-COVID (March 2020)	2.7%

What was the impact on employee jobs? Finally, as a bottom-line indicator, we asked what percentage of employees experienced a loss of their job or pay. We also asked respondents to verify how they obtained accurate information on these outcomes (e.g., looked it up, asked someone, have personal knowledge) and to provide documentation if possible. They reported about 15% were laid off or furloughed and also filed unemployment. A similar number experienced reduced or deferred pay. Another 10% of temporary workers and contractors lost their jobs. More than 40% experienced expense controls of some sort. However, about 13% reported having hired during this time, probably representing those organizations that benefited from the crisis as well as filling critical positions.

Filed unemployment	14.9%
Laid off or terminated	6.8%
Furloughed	8.4%
Reduced hours	10.6%
Deferred pay	3.8%
Discontinued temp/contract workers	9.6%
Controlled expenses	43.9%
Hired employees	9.9%
Hired contractors	2.9%

HRMAP

The pilot study in May and June gathered narrative responses of 800 HR managers as to the HR practices their organizations implemented in response to COVID. We sorted the most common responses into categories and converted the categories into a comprehensive measure of HR practices that we used in the current survey. We label these as HRMAP because they have enabled organizations to quickly adapt (or pivot) their management of employees in response to external shocks like COVID. In this section, we describe the HRMAP and the percentage of employees being managed by such practices.

Practices Regarding Remote Work Accommodation

As noted in the first question, participants reported that, on average, 60% of employees in their organization shifted to working from home (reported in May–June 2020). As of September, across organizations, more than 80% utilized this practice. For those jobs that necessitated on-site work, many organizations implemented hybrid or staggered scheduling.

Practices Regarding Enhancing Technology

Given that so many people are working at home, most needed computers and other technology to work remotely. As such, more than 80% of organizations purchased or made existing hardware and software available to use at home for at least some if not most employees. Another 40% allowed or required employees to use their personal computers. This latter practice saves cost for the organization, which is especially important when business is down, but it depends on employees having their own computers at home and on security concerns that may limit the use of personal computers.

Practices Regarding Enhancing Communication

With most workers being remote, maintaining communication is a critical concern for HR management. Agile HR practices used by more than half of organizations included more employee–manager and employee–employee check-in meetings. Moreover, 75% increased communication from senior management or HR in the form of email messages with updates or useful information, newsletters, all-hands meetings, and so on.

Practices Regarding Employee Relations

Maintaining morale and positive employee relations is a central concern for HR managers, and they adopted many HR practices to maintain or improve engagement. More than half of organizations used virtual non-work-related activities (e.g., happy hours, lunches, kid friendly activities, daily joke emails). About half of organizations gathered information from employees through surveys and focus groups to monitor morale through such means. More than 70% provided extra resources and information for working from home such as intranet pages, team-building tools, remote-work best practices, and others. More than 60% increased employee recognition of various types (e.g., awards, bonuses, gift cards, personal time off, care packages) to maintain morale. Finally, virtually all organizations provided personal protection equipment, such as masks and hand sanitizer, and emphasized safety.

Practices Regarding Work Management

Remote work has made the management of work much more challenging, and organizations have responded in a variety of ways. More than half increased supervision by increasing communication for the purpose of work management, and more than half created other virtual performance and coordination practices (e.g., virtual evaluations, file sharing, meetings to coordinate work). However, about half of organizations also revised policies to accommodate the changed situation, such as delayed, canceled, or revised performance evaluations, or revised procedures or standards of performance. Almost 30% increased monitoring and reporting on worker productivity. Finally, more than half of organizations increased planning and management meetings to coordinate work.

Practices Regarding Job Assignments

The disruption of work operations also required agile HR practices to ensure that employees could still be utilized to perform work that was important to the organization. About 40% had to reassign some workers to other jobs, and about 70% had to change the tasks of some jobs. Job sharing was utilized much less. Almost 60% of organizations cancelled or delayed projects. Finally, almost 90% had to change the way that work was accomplished for at least some employees due to social distancing and other COVID restrictions, and the need for work coordination among employees increased for most.

Practices Regarding Training and Development

As expected, training went virtual for both formal and informal types of training, and there were new training requirements for COVID, such as for cleaning and safety, which applied to most employees. In-person training often had to reduce the number of people present, which is also a common practice in educational institutions as they adapt to COVID. We also asked respondents if they were attending more, the same, or fewer trainings, and they responded with about a third each.

Practices Regarding Staffing

Unfortunately, the financial impact of the reduced product/service demand and ability to work caused by COVID required cutting payroll expenses. Previously, we reported the percentage of workers impacted by staffing changes. Here we examine the percentage of organizations using each HR practice. About one-third had layoffs or furloughs, and nearly half instituted a hiring freeze. Nevertheless, half of organizations maintained recruiting and hiring at some level. However, the changes to the jobs described earlier also resulted in changes to the formal job descriptions or hiring strategies in one-third of organizations. Finally, about a third of organizations utilized temporary workers as a hedge against the long-term uncertainty of the COVID crisis.

Practices Regarding Compensation and Benefits

The need for cost containment also included pay, in addition to jobs. Nearly half of organizations in our sample canceled, delayed, or froze raises and bonuses for some employees, and one-third reduced them. One-third reduced hours for at least some workers. About 75% of organizations implemented expense control of various sorts. However, about one-third of organizations increased some type of pay for at least some employees, such as hazard pay, overtime, or special bonuses, and half of organizations increased some type of benefits, such as time off, paid leave, and modified health benefits.

Practices Regarding Employee Assistance

Given the increased stress experienced by some workers due to the changes caused by the COVID crisis, HR responded by updating or promoting employee assistance programs in 60% of organizations and offering more mental health and wellness benefits in 40% of organizations. Virtually no organizations decreased emphasis on employee assistance.

Recovery and Return to Work

What percent of organizations have already recovered from the disruptions? As of the time of this survey in September 2020, virtually no one had recovered, and only a few percent had started. Almost 60% said that things were still getting worse or much worse. However, nearly 20% reported a minimal impact or need for recovery.

Substantially recovered	0.4%
Started to recover	3.9%
No recovery yet	19.8%
Impact of COVID-19 was minimal	18.4%
Still getting worse	44.2%
Still getting much worse	13.1%

What percent of organizations have developed a recovery plan? We anticipated that few would have recovered, so we also asked whether they had at least developed plans to do so. Only a small number had a formal plan (6%) or a plan for some parts of the organization (another 13%). The remaining 80% had only informal plans, were still working on them, or had no plans yet.

Comprehensive (formal) plans developed	6.4%
Plans developed for some parts of organization or aspects of recovery	12.9%
Plans are in place but informal	21.2%
Plans are still being formulated	34.1%
No plans yet	25.4%

What is the nature of the recovery plans? We focused on the return-to-work plan as opposed to all potential recovery plans because we suspected that remote work was the primary disruption. Only 20% said that their companies would return to in-person work immediately or would implement a phased approach. Nearly 50% indicated that they would allow employees to decide or would decide on a case-by-case basis. The potential health implications appear to make organizations reluctant about requiring employees to return to work involuntarily. More than 25% had no plan or were doing something different to recover.

All employees working from home will return to work in-person, full time	10.7%
We will implement a phased return to work strategy	10.0%
Some employees will return to the worksite while others will work remotely indefinitely	3.7%
We will allow employees to determine when they will return to work	18.1%
We will determine return to work on an individual or case-by-case basis	30.3%
We do not have a concrete plan for return to work yet	11.9%
Other	15.2%

How much progress have organizations made on their recovery plans? Only about 9% have fully implemented and another 27% have partially or have at least started to implement their recovery plans. More than 40% are waiting, and 20% have no plan yet.

Fully implemented	9.3%
Partially implemented	11.3%
Just starting to implement	16.2%
Waiting to implement	42.6%
No plans developed	20.6%

How long did it take employees to develop a work routine at home? Given that most organizations went to remote work, we asked how long it took employees to develop a work routine. The HR managers reported that more than two-thirds of employees took a couple weeks. Another 10% took a couple of months, and only 5% are still struggling.

A couple weeks	66.3%
A month	17.7%
A couple months	10.7%
They continue to struggle	5.2%

Do employees actually prefer to work at home? Given the many benefits of working at home for employees, such as informal attire, no commute, less supervision, and so on, we wondered whether employees might actually prefer to work at home. A majority of the HR managers reported that half or more of employees actually prefer to work at home. This may make recovery more difficult given that many organizations will rely in part on employee willingness to come back to work as part of their plan as described above. Yet, it is important to note that not all employees prefer to work from home.

No employees prefer to work from home	8.9%
About 25% prefer to work from home	34.3%
About 50% prefer to work from home	28.8%
About 75% prefer to work from home	23.7%
All employees prefer to work from home	4.3%

Will organizations use more remote work after COVID? Given that many employees have learned how to work at home and prefer it, we asked whether organizations might allow more remote working in the future. About 75% said yes.

Conclusion

In conclusion, we found that although most organizations have faced notable disruptions, they have also found ways to pivot their talent to accommodate this novel landscape. Although some organizations in our sample have developed and begun to implement their plans to recover and return to work, most are still developing plans, which makes these HRMAPs all the more important.

Max. Classroom Capacity: On Robo-Grading

Loren J. Naidoo, California State University, Northridge



Dear readers,

Happy new year! As this column is being published, many of you who are academics are, I hope, basking in the warm glow of having submitted all your grades for the fall semester. At the point I am writing this column however, I am buried in a mountain of grading, a mountain born of my own stubborn insistence on assigning written assignments and short-answer exam questions to my 150+ students. Let's be honest, grading papers and exams is rarely riveting work (neither are writing or taking them, to be fair to students). Despite my best attempts to focus on grading I often find my mind wandering, and of late my mind has wandered in one specific direction: Robots!

Almost exactly 100 years ago, the Czech play *R.U.R.* by Karel Capek premiered on January 25, 1921. This play is famous for the term “robot” being coined. I have always liked robots, starting with R2D2. I read books about robots, watch movies about robots, and I even own an *actual* robot or two. It's still a bit shocking to realize that we are now firmly living in the era of functional robots and artificial intelligence (AI). This was brought home for me, quite literally, when we received a robotic vacuum as a Christmas gift last year. We use it enough to make me wonder how many human cleaners are unemployed as a result of this technology. Maybe some of you have already ridden in an autonomous vehicle—it's not hard to imagine what impact *that* technology will have on taxi/Uber/Lyft/truck drivers. The appeal of these robot helpers has only increased with the coronavirus pandemic making salient the risk other humans can pose. In academia, I know many colleagues who are struggling with increased class sizes and workloads resulting from funding shortfalls due to the pandemic.

The challenge of trying to grade hundreds of short-answer questions accurately and consistently, even using a rubric, made me wonder whether a robot could do this better—specifically, the kind of AI technology that many companies now use to efficiently conduct sentiment analysis of, for example, Amazon product reviews. I mentioned this fantasy to my department chair who to my surprise enthusiastically told me about a company called Monkeylearn¹ (www.monkeylearn.com), and quite quickly, my dream became a reality! Well, kind of—keep reading and you'll see how things worked out. I'm going to take you through the process step by step, share with you the results, and propose some tentative conclusions.

But before I get into the gory details, it's important to say that I'm not the only one who has dreamed this dream of having a trusty robot sidekick to grade more quickly and reliably than any human could. Large education companies like ETS and Pearson have invested in developing automatic-assessment systems. Multiple states including Utah and Ohio have used robo-grading to evaluate writing ability in standardized test essays. These moves have prompted considerable [backlash](#), with [critics](#) providing vivid examples of utterly nonsensical essays that received high grades from automated grading systems. The tone of some of these critiques (e.g., “The use of algorithmic grading is an attack on the value of academic labor of both teachers and students”; Warner, 2018) reminded me of the flesh fair [scene](#) in the movie *AI* where an anti-robot showman decries David, the boy-like robot, as “the latest iteration to the series of insults to human dignity.” But that is not to say that the critiques lack substance. Standardized tests are high-stakes affairs, and it seems likely that many advocates for robo-grading may be more concerned with profit than with quality assessment or educational outcomes. Plus, assessing general writing ability may be too tall an order for AI at this point. My goal was narrower: I wanted to understand how useful robo-grading might be to score short-answer exam questions,² which brings us back to Monkeylearn.

Monkeylearn is a service that allows subscribers to create custom machine-learning models to (a) classify text into categories that the user defines and (b) extract key pieces of data from data that the user uploads to their website. No knowledge of coding is required—everything can be done through their website interface. I was curious to see whether their service could be used to grade students' answers to several open-ended questions that were part of an exam that was administered electronically on Canvas, the web-based learning management system, to 124 undergraduate students. These short-answer questions had suggested word limits of 3, 30, or 100 words based on the breadth and complexity of the question.

Let me take you through the steps involved using one exam question that asked students to identify which leadership theory best describes a leader who focuses on listening to their employees' concerns. This question had a suggested word limit of three, though this wasn't enforced, and some answers were much longer. I chose to use a "topic classifier model" to categorize answers according to criteria that I created based on my rubric. I downloaded the exam answers from canvas using the "student analysis" option. I uploaded this .CSV file to Monkeylearn and chose the column with answers to this question. Next, the interface asked me to create "tags" for each category that the AI would use. These I made based on my rubric. In this case, they were "individualized consideration," "relationship oriented," "other leadership," and "non-leadership." In earlier attempts I created tags like "fully correct," "partly correct," and "incorrect" but realized that these categories were too diffuse, and the models worked better when the tags were associated with specific content. For example, "individualized consideration" and "relationship oriented" were both considered "fully correct" in my rubric but look quite different from each other in terms of the answer text; therefore, it worked better to code them as separate tags.

The next step was to train the model. Monkeylearn pulls one answer from the dataset, and I clicked on the tag (or tags) that best categorized the student's answer. Then another answer is shown. These answers are not chosen randomly or sequentially; they are chosen strategically to help the model learn as quickly as possible. Tagging is a critical step as the model will learn to associate patterns in the data with the tags that you are assigning. How does it learn? The brief explanation I received from Monkeylearn was that the answer text is transformed into vectors, one- to four-word features, and the model examines what words happen before and after those vectors, and the relationships among them. Like other examples of AI, it's a black box (At least to me!). But one thing it does NOT seem to be doing is a simple word search. The model handled variations in wording (e.g., "individual consideration," "transformational: individual consideration," "consideration [relationship related]"), spelling mistakes, long sentences, and so forth. After a few trials, the model started to preselect tags based on what it had already learned—allowing me to observe what the model is learning and to correct where necessary. The tags I used for this question were meant to be mutually exclusive categories, with the word limit limiting answers to one category, but it's possible that the model could assign more than one category: The answer "IC/relationship orientation" would likely be tagged as both "individualized consideration" *and* "relationship oriented."

After about 20 trials—a remarkably small amount of data—the model was considered trained enough to use. It took all of 5 minutes! At this point, I could have continued training the model, but I chose to test the model by running the model on all of the exam data. Ideally, I would have had separate training and testing data, but I didn't. The result of running the model was that my original .CSV file was outputted with two new columns: a classification (how each student's answer was tagged) and confidence score for each classification that ranged from zero to one, with higher scores corresponding to higher confidence. It's not clear to me how the confidence score is computed, but I'll say more on that later. I used MS Excel formulas to convert categories into numerical scores (e.g., categories of "individualized consid-

eration” and “relationship orientation” received full marks, and other leadership and non-leadership received different levels of partial marks). Boom—question graded.

At this point, I reviewed the categories that the model assigned and compared them to my own grading of the same four criteria. My own grade disagreed with the model’s 14 times out of 124. The average confidence score for those trials was .438 compared to an overall average of .569. Five of the discrepancies were borderline answers that, upon reflection, I realized the model had coded correctly. The results for two other very-short-answer questions with three-word limits were similar: 12 and 10 disagreements and .81 and .42 average confidence scores, respectively. In summary, robo-grading of very short answers using Monkeylearn worked very well—it learned extremely quickly and was very “accurate” with my own grades as the basis for comparison. The reliability of the model seemed as least as high as the reliability of this human grader—we both made some mistakes, but I took a lot more time. Especially with very large class sizes, you might have Monkeylearn grade the exam questions, review by hand the subset of answers with low confidence ratings, and end up with equally reliable grades compared to grading by hand in much, much less time.

I used the same process to robo-grade answers to a multipart case question, each part with a recommended 30-word limit. The case described an organization with an employee motivation problem and asked students to (a) diagnose the problem, (b) propose an intervention as a solution to that problem, and (c) explain why their intervention should work based on relevant theory. Most of the diagnoses had to do with various job characteristics, and most of the interventions and explanations were based on job enrichment, goal setting, or incentives. With the increased complexity of these questions, the tagging process became more time consuming. Whereas almost every answer to the very-short-answer questions fit only one category, here a bit less than half of the answers fit two or three categories. Still, the model itself took about the same number of trials to train. As before, I opted to use a minimally trained model. The results were much worse. Of the 124 answers to Part a, I categorized 48 of them differently than the model. This excludes cases where the primary categorization differed, but my category aligned with a second or third category identified by the model. Four of the 48 discrepancies were due to the model failing to provide any category for the answer. More problematic, the average confidence rating for the disagreements (.654) was little different than the average (.687). For Part b, the results were just as bad. There were 47 disagreements, of which 32 resulted from the model failing to categorize at all. Again, the average confidence rating of disagreements (.622) differed little from the average (.697). There were 30 disagreements (average confidence = .644) in Part c, with little difference in confidence ratings compared to the overall average (.695). In summary, robo-grading of these moderately short answers was still very fast but produced discrepancies with my hand grading about one-third of the time, though it’s important to keep in mind that there is much more room for interpretation in evaluating these answers to begin with. I also used minimally trained models. Perhaps investing a bit more time in training the models would pare the discrepancies down to a more manageable level.

The final question was the most complex. Students were asked to write a script in which they deliver performance feedback to an employee. The suggested limit was 100 words—not quite an essay, but a long short answer. I had a detailed rubric for this question. Working out how to convert it into tags took me about an hour. I developed 11 separate criteria for feedback content (e.g., friendliness in customer service) and delivery (e.g., was the feedback not “owned”). Training the model took 48 trials and about 90 minutes. The median number of categories assigned per answer was 4, ranging from 1 to 5 categories. Of the 124 answers, 27 of them produced identical results as my grading, whereas the remaining 97 produced different results. The average confidence rating across all categories was .73. But, because the grade is a product of all of the categories for each answer, it makes more sense to look at the product of

the confidence ratings for each answer. The overall average of this product was .32 (.31 for the answers that were graded differently).

I carefully reviewed the discrepancies and corrected the errors, some of which were made by me. Because there were so many errors, I decided to recreate the model from scratch, training it using the set of categories derived from the first attempt and “corrected” by hand. It took 52 trials and about 40 minutes to train the model. This time, there were 62 cases where my answers were identical to the model’s—exactly half. The average confidence rating was .76, and the average product of the confidence ratings per answer was .36. So, the model improved, but at considerable cost in terms of time. Moreover, I looked at the grades that were produced by me compared to the model. The grades were a function of the combination of the different categories for each answer—for some categories, points were added; for others, subtracted. The correlation between my grades and the model’s grades was $r = .81$. In summary, the effort required to develop a model that can reliably categorize across this many different categories is considerable. The results don’t look great but again must be understood in the context of baseline of reliability of a human grader. In the process of trying to verify where the model went wrong, I quite often concluded that my original grade was wrong and the model was right. If I had an independent grader with whom to compare, I’m not certain my grades would have been more closely aligned with that person’s compared to the robo-grades.

Before I get to my conclusions, it’s important to note the many limitations of my methodology. First, I was the only human rater, and clearly a biased one, though not invested in the success or failure of robo-grading. Second, I used data from 124 students in one undergraduate class in management at one university. I used short-answer questions that varied both in terms of the complexity of the rubric and the length of responses, and these two factors covaried, making it difficult to understand the distinct impact of each. Third, I used one platform, Monkeylearn. I didn’t try other options, and I have close to zero understanding of how the coding works.

Here’s what I can tentatively conclude from this exercise:

1. Robo-grading works better with narrow questions for which there is a small universe of answers, and particularly when the answers are short in length. However, these questions are also the easiest and quickest for humans to grade, so the value comes at scale. It’s difficult and tedious for a human to reliably grade several hundred questions, even easy ones. Robo-grading can help grade very-short-answer questions in very large classes, particularly when a human grader can check low-confidence cases by hand. It’s a nice alternative to automatically graded multiple choice questions (the original robo-grading!), especially if your institution was paying for your Monkeylearn subscription.
2. As the complexity and length of the answers increases, the amount of thought and time required for developing the rubric, training the model, and looking for problems also increases, reducing the efficiency of robo-grading. For the number of students that I had, it probably wasn’t worth it, especially for the longer format items. With larger numbers of students (e.g., if the same exam was administered every semester), then investing more time in training the model with more data might be worth it.
3. The validity of the output of the models is mostly a function of the design of the rubric and the training of the models. Even though robo-grading did not consistently produce results that corresponded closely to my own grading, the most valuable aspect of trying to use robo-grading was that it forced me to think very carefully about (a) my scoring rubric to generate the tags and (b), during model training, what specific ideas or phrases are evidence that an answer falls into a category, and how categories of answers get translated into numerical grades. Even if I never use robo-grading again, I think I will be a more precise and reliable grader, less prone to relying on vague, holistic impressions

of answer quality or whether criteria were met, which are likely to be unreliable. And I thought I was already relatively detail oriented with my grading procedures.

4. Robo-grading is smarter than I thought. For example, one model coded the answer “I would most likely use goals, such as if the factory produces x amount of items then employees will receive a certain percentage of profits” as “incentives” rather than “goals.” I had to read that answer twice to make the same determination.
5. Robo-grading is as dumb as I expected. For example, one model coded the single-letter answer “r” (I assume the student ran out of time) as “job enrichment.”
6. I’m dumber than I thought. Being forced to revisit my prior grading made me realize how many mistakes I make when grading. Or, even if they weren’t mistakes per se, how subjective and variable judgments can be.
7. Robo-grading stupidity recapitulates human stupidity. Even one inadvertent mistake during model training can be dutifully learned and applied. I accidentally clicked the wrong button and tagged “theory y” as belonging to “charismatic leadership” without realizing it, and the model was quite “accurate” in tagging subsequent theory-y answers as charismatic.
8. A right answer combined with less clear content (or even a bunch of nonsense) may be tagged as a right answer. But in fairness, that’s a tricky situation for human graders, too.
9. If robo-grading was readily available, it might make me more likely to design exams that are more amenable to robo-grading. That might be good because robo-grading may be more reliable and feasible to use with large class sizes. That might be bad because it could limit how much deep-level understanding or complex thought we try to assess. Still, I would argue that it’s probably better than the ubiquitous multiple choice question format.
10. Robo-grading can be used as a basis for providing students with feedback on written answers in the form of the categories to which their answers conformed. This may be more feedback than most instructors provide to students on exams, particularly in large classes, but it also may be less depending on how much time the instructor devotes to providing feedback.
11. I didn’t *actually* use robo-grading to assign grades. The actual use of robo-grading in higher education raises all kinds of complex ethical and practical issues. Do students have a right to know that robo-grading is being used to assist instructors? Will students object to being assessed in this way? How quickly will students develop ways to cheat the system, and how effectively can AI models be trained to detect these attempts? Does adopting robo-grading free up instructor time that can be devoted to other teaching activities that may have a bigger impact on student learning? Does robo-grading exacerbate existing trends, such as those toward larger class sizes and fully online formats, that degrade educational quality?

Interested in this topic or in hearing more about my research on robo-grading? As always, your comments, questions, and feedback are welcome: Loren.Naidoo@CSUN.edu. Stay safe and healthy!

Notes

¹ A quick note about Monkeylearn: They are a private company, they did not ask me to write about them, I have no financial relationship with them, but I am taking advantage of their free 6-month “academic” subscription.

² There’s quite a bit of empirical research on this and related questions in computer science and education, among other disciplines, which I don’t have the space (or expertise, in some cases) to review here.

Reference

Warner, J. (2018). More states adopt robo-grading. That's bananas. *Just Visiting* blog. <https://www.insidehighered.com/blogs/john-warner?page=18>

Foundation Spotlight: Welcome to the Brave New Normal

Milton D. Hake

Things are never so simple as we think/believe/hope that they are. As the year 2020 shows so clearly and dramatically in hindsight, things keep changing. It's not just the global pandemic and rampant incivility. Expertise today is easily dismissed as being mere opinion. False dilemmas and zero-sum frameworks are far too plentiful. The critical thinking abounding in the roots of "the scientific method" appears to be in short and shrinking supply. Guess what—things are going to keep changing.

Not only will things keep changing, but their best explanations will keep changing too. Physicist David Deutsch writes: "I have often thought that the nature of science would be better understood if we called theories 'misconceptions' from the outset, instead of only after we have discovered their successors. Thus we could say that Einstein's Misconception of Gravity was an improvement on Newton's Misconception, which was an improvement on Kepler's. The neo-Darwinian Misconception of Evolution is an improvement on Darwin's Misconception, and his on Lamarck's. If people thought of it like that, perhaps no one would need to be reminded that *science claims neither infallibility nor finality*." (my emphasis, see David Deutsch, *The Beginning of Infinity: Explanations That Transform the World*, 2011, p. 446)

As applied scientists, I-O professionals seek explanations about the world of work. The world of work has changed dramatically over the past few years, and it will be good to keep in mind that I-O science and practice is neither infallible nor final.

I-O is unique. It is special because of its unwavering emphasis on "praxis," the synthesis of theory and practice *without presuming the primacy of either*. Praxis is symbolized in the double helix design shown in the glass statues SIOP gives to distinguished award winners.

As I-O professionals, our stock in trade is thinking critically, observing anomalies, and removing error from explanations. We investigate variance, bias, main effects, concepts, and theories. We are authorities about psychology applied to the world of work.

Ever since the beginning of the Enlightenment, questioning authority has been viewed as a good idea. Of course, authority does not like being questioned. That being said, questioning *is* at the heart of peer review. No doubt about it—I have often wished for more sympathetic peers. Nevertheless, peer review is one of our foundational strengths.

A second foundational strength is our engagement as *applied* psychologists. Application immediately brings us into the sphere of public affairs, with the responsibility to address issues of public policy. The realm of public policy is even more fraught and uncertain than the realm of science and peer review.

Passage of the legislation that became the Civil Rights Act of 1964 shows the complex and slow pace of setting public policy. On June 10, 1964, Everett Dirksen addressed the U.S. Senate as its minority leader, urging his colleagues to close debate and pass the bill. Here I will quote his line from Victor Hugo, "Stronger than all the armies is an idea whose time has come," followed by his call to action, "The time has come for equality of opportunity in sharing in government, in education, and in employment. It will not be stayed or denied. It is here." Dirksen's [full text is online](#)—read especially the opening paragraphs to glimpse the difficulties in advancing ideas whose time has come.

To summarize: Words and ideas matter. Evidence matters. Some opinions are better and more trustworthy than others.

Two Foundation initiatives came into sharp focus during the past year. The first was built over 2+ years, and the second emerged fully fledged in just 6 weeks. They show how the SIOP Foundation is advancing our applied organizational science as we evolve in these challenging times:

1. The Visionary Circle, a venture to build a renewable and continuing source of funding for I-O praxis, got off to a roaring start. The gala celebration we expected to hold in Austin zoomed into history: As part of SIOP's 2020 Virtual Conference, four finalists presented their proposals for the \$100,000 Visionary Grant. A vote by the donors selected the winning proposal, [*Working Off the Grid: Building Resilience in the Gig Economy*, by Susan Ashford, Briana Caza, and Brittany Lambert](#). The next Visionary Grant is scheduled for presentation at the 2022 SIOP Conference in Seattle—join the Visionary Circle at the \$1000 level now!
2. The brutal death of George Floyd on Memorial Day led to a special appeal for contributions to an Anti-Racism Grant Fund. \$50,000 was raised in June, 35 project proposals were submitted in July, and [five small grants were awarded on August 24](#). We now seek contributions to open a second Call for Project Proposals as soon as possible. [Donate now!](#)

The mission of the SIOP Foundation is to connect donors with I-O-psychology professionals to create smarter workplaces. We do it with endowments and term gifts that fund grants, scholarships, and awards. The SIOP Foundation Trustees welcome your ideas and donations for advancing I-O psychology—contact any of us. Consider creating an endowment to build for the future by giving appreciated stock, or including a bequest in your estate plan, and join the second cohort of donors to fund the next [Visionary Circle Grant](#) in Seattle or contribute to the [Anti-Racism Grant Fund](#). Thank you for your continuing trust.

Now more than ever, it is crucial to keep our minds open and to keep on opening them because things are never so simple as we thought they were. The need for I-O praxis is enormous.

Milt Hakel, President, mhakel@bgsu.edu, 419-819-0936

Rich Klimoski, Vice-President, rklimoski@gmu.edu

Nancy Tippins, Secretary, nancy@tippinsgroup.com

Leaetta Hough, Treasurer, leaetta@msn.com

Adrienne Colella, Communications Officer, acolella@tulane.edu

Mirian Graddick-Weir, Trustee, mgraddickweir76@gmail.com

Bill Macey, Trustee, wmacey9@gmail.com

John C. Scott, Trustee, JScott@APTMetrics.com

The SIOP Foundation

440 E Poe Rd Ste 101

Bowling Green, OH 43402-1355

419-353-0032 Fax: 419-352-2645

Online: SIOPFoundation.org

Email: SIOPFoundation@siop.org

Culture-Infused Industrial and Organizational Psychology

Sharon Glazer and Krystal N. Roach

with

Reeshad Dalal, Laura Dryjanska, Andrei Ion, Catherine T. Kwantes, Rana Moukarzel,

D.J. O'Donnell, & Chet Robie

on behalf of the International Affairs Committee

The world is experiencing a major global culture shift due to COVID-19, which is also affecting the welfare of countries, organizations, families, and individuals. As nations differ in their tendencies to value economic security and health, the people, entities, and institutions within countries are adjusting differently. It is clear, however, that globally, we are witnessing a revolution of culture changes, whether from an industrial and organizational psychology (I-O) lens, it is the culture of the global virtual workspace or the group cultures of essential, nonessential, or unemployed workers. The recognition of what is really important in life is shaking up some things, and yet others remain the same. Businesses today are suffering through COVID-19-related required closures, ergo so are workers. Some people are continuing to maintain mostly comfortable, well-paying jobs but feel the strain of restrictions on physically meeting people (both indoors and outdoors). Others, in contrast, are facing threats from lack of income coupled similarly with minimal social contact. Where are we, as I-O professionals, in this evolving social construction of our world of work?

I-O professionals have a great deal to offer at this time but are often not at the table discussing with decision makers how to best address the new work challenges. Where are I-O professionals in facilitating adjustments and changes in the new culture of the global virtual workforce? How can cross-cultural psychology inform I-O so that I-O professionals can help design, redesign, modify, and support workers and nonworkers during the shared global transitions the pandemic has created? The incorporation of a global lens to I-O is becoming more markedly important as trade, commerce, communications, cybersecurity, and the like become all the more salient due to our physical isolation from one another, in the name of security and health. What can cross-cultural psychology do to inform I-O's contributions and to promote and sustain a healthy workforce in transition?

This article has two discrete aims that indirectly also complement one another. The first aim is to promote a cross-cultural lens to I-O so that I-O professionals can effectively navigate the current state of work and the workforce. The second aim is to share with the I-O community outcomes from the June SIOP virtual conference Community of Interest session, *Identifying Emerging Issues in I-O Psychology Around the World*.

A Cross-Cultural Lens in Industrial and Organizational Psychology

To address the **first aim**, we first ask, "What is culture?" Culture can be defined as values, attitudes, axioms, norms, language, and history that are shared within a group of people, passed down from one generation to the next and taken for granted by those within it (Glazer, 2002). Family units, social groups, professional groups, business units, organizations, and nations all have cultures that influence individuals who are part of them and also are influenced by people who are a part of them (Erez & Gati, 2004).

Cross-cultural psychology reinforces perspective taking in ways that I-O does not. In order to effectively engage with people around the globe, it is vitally important to understand their perspectives. How are

people around the globe viewing the world of work during this pandemic? What experiences in their past have they had that make them better or less prepared than those in organizations in other countries? What are the relationships among government, politics, healthcare, population density, cultural values, infrastructure, communications technology, and economic landscapes that shape affects, behaviors, and cognitions in one country (compared to other countries) that makes them successful in handling organizational issues and ensuring a healthy workforce?

Through a cross-cultural psychology lens we are reminded to look beyond, or perhaps better yet well in advance of, statistics to guide decision making. It reminds us that statistics are merely one means for understanding human behavior; there are other approaches that require nonstatistical methods for appreciating and understanding cultural differences. We cannot be short sighted by statistics; they are only one component of the picture. We believe that qualitative and mixed methodologies should complement more quantitative and positivistic approaches. Aycan and Gelfand (2012) explain that cross-cultural research has four functions, including (a) expanding the range of organizational behavior, (b) testing the universality of organizational theories, (c) illuminating emic (i.e., culture-specific) phenomena and reducing ethnocentrism, and (d) improving intercultural interactions.

We believe that our attention today should be focused on the third point of identifying and understanding emic phenomena. It is our perspective that we need to embrace the opportunities of sharing information so that we can consider creative ways of contributing our expertise to improve people's work experiences around the world—around this new evolving world of work.

The International Affairs Committee (IAC) of SIOP serves to connect SIOP members globally with the intent of promoting the exchange of international and cross-cultural practice and research. Several of the topics mentioned and discussed above are ones that the international community of I-O professionals may benefit in addressing together.

Outcomes From the IAC Community of Interest

The **second aim** of this article is to share the outcomes of the IAC's Community of Interest (COI) session held during the SIOP virtual conference in June. In so doing, we first provide a brief background of the aims of the IAC.

The IAC is responsible for

- Fostering the collaboration between national and international conference attendees;
- Encouraging international research collaborations in I-O psychology;
- Facilitating the international dissemination of I-O-related knowledge; and
- Establishing a collaborative framework with various international I-O organizations/associations.

We strive to achieve these aims by creating global connections between I-O professionals (students, faculty, and practitioners). As a first step to understanding the needs of the international community of I-O professionals, the IAC hosted a COI during the 2020 virtual conference in which roughly 30 attendees were divided into four breakout rooms. Each breakout room represented a different theme that emerged from a brief response to questions posed when attendees preregistered to participate in the COI. The four themes were

1. Healthcare and well-being across cultures;

2. Psychometrics, selection, and assessments across cultures;
3. Internationalizing I-O psychology;
4. Immigration, migration, and working conditions for undocumented migrants.

Interestingly, the issue of COVID-19 was not identified as a topic of interest, though it was brought up in breakout-room discussions.

Attendees in each breakout room were asked to discuss three questions. Below are the questions that were posed and attendees' responses, summarized and organized by action category. Several common themes emerged, and in our review of the notes taken, it is clear that the attendees want to see actions that align very clearly with the goals (responsibilities) of the IAC.

1. What are actions the IAC can pursue in order to raise awareness around cross-cultural aspects of ...[each of the themes]?
 - Connect people
 - Find ways to facilitate research connections across cultures in an effort to increase collaborations and global diversity in study samples.
 - Create a platform/database to connect/match researchers and practitioners on interests and locations where people want to conduct research (e.g., lunch-club platform in Silicon Valley).
 - Create a list of I-O-related local groups around the globe to be connected to local I-O communities internationally.
 - Disseminate knowledge.
 - Contribute to practitioner-oriented journals with an expedited review process
 - Identify and share information about top-tier journals that regularly publish on international topics that relate to I-O psychology.
 - Contribute to *TIP* on best practices in the domain of occupational health and well-being around the globe.
 - Consider focusing efforts in countries and regions where there are several groups that do not seem to have much contact with SIOP.
 - Polling or surveying international groups and contacts on topics of research or practice that are of interest to help bridge the gap in those areas.
 - Extend research and practice
 - Encourage I-O research on immigration, as well as on immigrant and refugee populations, as current I-O research tends to capture the experience of expatriates but not immigrant populations, including undocumented immigrants and refugees.
 - Apply some considerations about immigrant populations to a wider scenario than the USA, sharing helpful practices from overseas (e.g., sharing cultural mediators relevant to practice).
 - Investigate what is being done in crisis management research and practice, especially with regards to COVID.
 - Many of the WEIRD (Western, Educated, Industrialized, Rich, and Democratic) countries (Henrich et al., 2010) have organized work psych groups, whereas others do not. This raised a question of where and how we can explore I-O in more culturally distant cultures. More specifically:
 - What best practices and research are generalizable around the world (i.e., etic)? In addition, it is also useful for researchers and practitioners to know what best practices and research are culture specific (i.e., emic).

- It is possible to broaden the scope of our search for I-O research and practice, focusing on regions both with and without an organized I-O presence, and also investigating work being done in similar disciplines across cultures (e.g., management, business) and coming from different sources (e.g., international human resource practitioners, internal consultants at multinational enterprises).
2. How can SIOP facilitate internationalization of practice and research in each of the themes?
- Connect people
 - Collaborate with other organizations (e.g., EAWOP, CSIOP, IAAP) to create a task force to engage in a collaborative research effort on worker-health research.
 - Support outreach to researchers internationally in ways that include within-country (i.e., emic) variations.
 - Investigate areas in which SIOP can provide additional support to international students studying in the United States and students from other countries who are studying I-O.
 - Support and encourage international experiences that enable faculty, students, and practitioners to travel abroad (e.g., creating a formal exchange program).
 - Access to more affordable membership options for international members.
 - Disseminate knowledge
 - Issue guidelines to address specific legal and ethical concerns, especially regarding research with undocumented immigrants.
 - Develop a repository of online resources on topics related to the recommended white papers that need to be navigated in I-O research and practice.
 - Extend research and practice
 - Encourage a special call for a theme track on well-being and on healthcare from an international or cross-cultural perspective, which can help inform practice.
 - Increase access for international I-O professionals to the SIOP conference by having a place to indicate that a submission is international (non-U.S.-based) or cross cultural, and then evaluate if submissions that would not normally be accepted on the basis of U.S.-centric biases may be admissible due to their international or cross-cultural lens.
 - Miscellaneous
 - Clarify SIOP's aims for the IAC. Is the IAC foremost intended for outreach from SIOP internationally or as a means to internationalize SIOP?
 - Consider making a values statement on immigrant employees, in much the same style as SIOP's impressive values statement on LGBTQ employees a few years ago.
 - Consider a non-U.S.-based location every other year or evaluate the traditional conference format to consider how SIOP can increase more international attendances.
 - Is there a need for a president/executive to encourage internationalization?
3. How can the IAC best contribute to SIOP's white paper series?
- Points to remember
 - What are some cross-cultural issues that managers, particularly those in the healthcare industry, are facing?
 - When preparing white papers, remember to consider what actions managers and HR can take away from the white paper.
 - Ideas and suggestions for white paper topics
 - Health and well-being
 - Empowerment of nurses in healthcare.
 - Gig work and occupational stress across the globe, e.g., lack of training, national policies on gig work, compensation, and benefits.

- Cross-cultural views on stress and well-being and variant predictors (e.g., income, status, equity and equality, justice).
- Infectious diseases (e.g., COVID-19) that disproportionately impact marginalized populations (e.g., immigrants). Specifically, challenges that practitioners face in keeping these populations safe, and explaining how practitioners can ensure health, safety, and employee dignity in workplaces.
- Cultural lens on within-culture communities
 - Global lens on the digital divide among unique cultural communities (e.g., the deaf, autistic, rural, and indigenous communities).
 - Legal, ethical, and methodological issues that need to be navigated in I-O research and practice involving documented and undocumented immigrants. Methodological challenges might include measurement equivalence, lack of trust, technological barriers (e.g., lack of representation on online panels such as MTurk), and cultural barriers (e.g., lack of experience taking surveys).
 - Implications of human resources management practices (e.g., job design/redesign, pay and benefits, health insurance, physical safety regulations, union organizing, and “adverse impact”) related to immigrants. (*Note: Immigrants may not be a legally protected category in many countries, therefore an adverse-impact approach could be applied on ethical rather than legal grounds.*)
- General cross-cultural information
 - Problems of access to work psychology research in developing nations (e.g., journal access, cost of textbooks, Internet access).
 - Differences in the names and practices of I-O in different regions around the world.
 - Transporting assessments globally.
 - Legal issues across the globe that I-O professionals should know about (e.g., implications of I-O input on undocumented immigrants in different countries).

The IAC has been discussing and planning implementation of some of the above recommendations. For example, the IAC is working with the Membership Committee to create greater outreach to prospective members around the globe, updating questions to the membership survey, and considering ways of increasing dual memberships between a region-wide association and SIOP. Additionally, IAC members have submitted responses to two focal articles in *Industrial and Organizational Psychology: Perspectives on Science and Practice* and two new white papers are in development. The IAC is also currently exploring the creation of a social media account.

As a second step to understanding the needs of the I-O community, we encourage you to reach out to the IAC (via email to: iac@siop.org) to share with us any contact information you may have with local I-O groups around the globe. We are working intensely to identify local I-O groups across the globe so that we can create a database/searchable repository. Please assume we do not know of one near you and email us.

We would also like you to contact us if you would like to author a white paper on your own topic of interest or any other topics we have provided above. You may see some of SIOP’s existing white papers (many of which were contributed to via the IAC) here: <https://www.siop.org/Research-Publications/SIOP-White-Papers>.

Finally, please consider applying early to join the IAC. Applications should be submitted, typically within 1 month of the SIOP conference, through the SIOP Volunteer System (SVS) sign-up form. Membership dues

must be up to date to join any SIOP committee. We seek diversity and inclusion of I-O colleagues from around the globe, both in academia and practice. The committee is organized around several subcommittees, including conference, visibility, publications and white papers, grants and awards, and procedures and processes. In addition, the IAC has recently created a new subcommittee with specific attention to international students interested in I-O. The subcommittee is intended to support students connect with local groups in their region or country, to educate students about U.S. norms and expectations as an I-O practitioner and researcher, and to create global connections. Several committee members serve as liaisons to internal (to SIOP), domestic, and international organizations and associations.

Summarily, the IAC can serve as a conduit for bringing together I-O professionals from around the globe to tackle wicked issues related to work-, organizational-, and personnel-psychology matters, particularly in a confined environment created by COVID-19. This newly developing global work culture coupled with the focal interests of those who attended the IAC's COI session show that it is clear that the international community of I-O professionals have much to contribute. We invite you to contact us with any questions or comments, as well as connections to your local I-O group.

References

- Aycan, Z., & Gelfand, M. J. (2012). Cross-cultural organizational psychology. In S. W. J. Kozlowski (Ed.), *The Oxford handbook of organizational psychology* (Vol. 2, pp. 183–214). Oxford University. doi: 10.1093/oxfordhb/9780199928286.013.0033
- Erez, M., & Gati, E. (2004). A dynamic, multi-level model of culture: From the micro level of the individual to the macro level of a global culture. *Applied Psychology: An International Review*, 53, 583–598. doi: 10.1111/j.1464-0597.2004.00190.x
- Glazer, S. (2002). Past, present, and future of cross-cultural studies in industrial and organizational psychology. In C. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology* (Vol. 17, pp. 145–185). Wiley. doi: 10.1002/9780470696392.ch5
- Glazer, S., & Ion, A. (2020, June 22). *Identifying emerging issues in i-o psychology around the world*. [Community of Interest session]. Presented at the 34th Annual Conference of the Society for Industrial and Organizational Psychology, virtually delivered.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not WEIRD. *Nature*, 466, 29. doi: 10.1038/466029a

SIOP Award Winners: Meet the Winners of the 2020 William A. Owens Scholarly Achievement Award Who Share Insight on “What Is Work–Life Balance Anyway?”

Liberty J. Munson



As part of our ongoing series to provide visibility into what it takes to earn a SIOP award or grant, we highlight a diverse class of award winners in each edition of *TIP*. We hope that this insight encourages you to consider applying for a SIOP award or grant because you are probably doing something amazing that can and should be recognized by your peers in I-O psychology!



This quarter, we are highlighting the winners of the William A. Owens Scholarly Achievement Award: **Wendy Casper**, Hoda Vaziri, **Julie Holliday Wayne**, Sara DeHauw, and **Jeff Greenhaus**.

Why did you apply?

We applied because the paper had received a lot of positive feedback and attention from other scholars. Last year, this paper was a top-five finalist for the Rosabeth Moss Kanter Award for Excellence in Work–Family Research, which is an international award for the “best of the best” in work–family research, so we knew it was a strong paper. When we saw the call for SIOP awards, we decided to submit for the Owens Award.

Share a little bit about who you are and what you do.

Wendy Casper is the Peggy E. Swanson Endowed Chair of Management and associate dean for research at the University of Texas at Arlington. Hoda Vaziri is an assistant professor of management at the University of North Texas. Julie Holliday Wayne is professor of management at Wake Forest University. Sara DeHauw is HR advisor at Ghent University, and Jeff Greenhaus is professor emeritus at Drexel University.

Describe the research/work that you did that resulted in this award. What led to your idea?

The project was initially started by Wendy Casper and Julie Wayne who became interested in researching the topic of work–life balance, and, in doing so, we realized there was no agreement in the literature as to what this construct meant as there were a multiple of definitions. So, we started a journey of trying to sort through the growing but disjointed and messy literature on balance. The initial idea was to code all the articles on balance to try and summarize what conceptual and operational definitions existed in the literature and use this as a springboard to develop our own definition of how balance “should” be defined and measured. Julie and Wendy also did another study of balance with data collected from an engineering consulting firm where we asked people to complete various measures of balance and

asked how they personally defined balance, so we had data on laymen's definitions to inform our proposed definition as well. Wendy and Julie asked Jeff to join the team given the key role he played in defining other key work–family constructs like conflict and enrichment. Jeff brought Sara who was working with Jeff as a visiting PhD student at Drexel at the time. Later, Hoda joined the team initially to help with the massive coding. As the paper developed, Hoda took a leadership role in the data analysis and helped shape the paper into what it is today.

What do you think was key to you winning this award?

I think the key to winning this award was a very strong team working together. We all wanted to conduct a meaningful, comprehensive review that truly moved the balance literature forward, so we shared the same vision. We also had healthy conflict that improved the quality of the paper. We spent many years meeting at conferences like SIOP, AOM, and the Work and Family Researchers Network having endless debates over how balance should be defined before we finally developed a definition that we could all agree on! Each member brought unique strengths that significantly improved the research. Hoda's involvement was vital in getting through the review process. She came up with ideas for analyses that could address reviewer concerns. For instance, in the paper, we use a diversity index to quantify the level of disagreement in the literature about the definition of balance. In the first review at *JAP*, the reviewers did not buy our argument that there was still disagreement in the literature about balance—they argued that the disagreement was already resolved. Thanks to Hoda's great idea to use the diversity index, we could empirically show that major disagreement still existed.

What did you learn that surprised you? Did you have an "aha" moment? What was it?

Something that surprised us is how difficult it was to get five people to agree about how to define balance! But, alas, that was also our strength as we had debated the topic for years before we went into the review process.

What do you see as the lasting/unique contribution of this work to our discipline? How can it be used to drive changes in organizations, the employee experience, and so on?

Work–life balance is a popular topic in conversation and in the media. Yet, science currently lags behind in being able to inform practice in evidence-based ways. Our hope is that this paper can advance science and practice on balance by bringing some much-needed consensus on what balance is conceptually and how researchers and practitioners should measure it operationally. From that basis, our hope is to push the literature in a new direction to truly understand balance and to examine its correlates. While researchers know a lot about work–family conflict and enrichment, much less is known about balance. This is important for several reasons. First, work–family conflict and enrichment are directional constructs whereby work and family spill over into one another such that one role creates harm or benefit to the other role. In contrast, balance is a more global evaluation of how work and nonwork fit together and is not directional. Second, work–family conflict and enrichment involve the interface between work and family, whereas work–nonwork balance focuses on the interface between work and all of the nonwork domain. This is important because the nonwork domain is much broader than just family, and for some people, especially those who are single and childfree, there may be other aspects of the nonwork domain that are more central to their identity and that take more of their time than family. Our research suggests that balance is empirically distinct from work–family enrichment and conflict and predicts variance in employee attitudes and behavior above and beyond conflict and enrichment. For these reasons, we believe that the literature on the work–nonwork interface should supplement its emphasis on con-

flict and enrichment with a greater focus on balance. We hope our paper will help spur the literature to move in that direction.

How did others become aware of your award-winning work/research?

We presented a very early version of this paper at SIOP in Hawaii in 2014. After that, work–family researchers who had been at the session often asked about it. We also got some press from being a top five article for the Kanter Award in 2019, which was publicized through the Work and Family Researchers Network. After it was published in the *Journal of Applied Psychology*, it quickly began to gain interest and citations.

To what extent would you say this work/research was interdisciplinary?

Work–family research is inherently interdisciplinary, so the literature we were coding for our data set comes from a variety of fields including sociology, economics, and family studies. That said, all of us have a background in I-O psychology or organizational behavior, so we tended to use that lens in our research. The focus on construct-validity issues in this work is reflective of our disciplinary paradigm of I-O psychology.

Are you still doing work/research in the same area where you won the award? If so, what are you currently working on in this space? If not, what are you working on now, and how did you move into this different work/research area?

Hoda, Julie, Wendy, and Jeff, along with some other research friends, are working on a meta-analysis of the antecedents of balance. Hoda, Julie, and Wendy are also working on a scale-development piece based on the definition of overall balance and the facets of balance in this article. Once the scale is developed, this will open many doors for studying balance. Sara has moved to a more practice-based career and is not doing research any longer but is putting these ideas into practice in her own life.

What's a fun fact about yourself (something that people may not know)?

Work–family researchers are very warm and welcoming, and we are always excited to bring new scholars into the work–family research family! For many years, we have enjoyed convening with other work–family research friends on Sunday night at the Academy of Management for a great dinner. Thanks to work–family research friend Shaun Pichler, who started this awesome tradition, we have had great meals and even better company all over North America. Jeff's wife, Adele, has been a regular attendee, and Wendy's husband, Roger, and Julie's daughter, Aubrey, have also joined us. As Hoda and her husband Hossein are about to welcome their son any day, we are hoping this newest research family member might join us sometime in the future!

What piece of advice would you give to someone new to I-O psychology? (If you knew then what you know now...)

Our advice to new SIOPers is to get and stay engaged in SIOP and other aspects of your professional community. The world of I-O psychology is filled with some awesome people who will become lifelong friends. Find your people. Embrace teamwork. Build community. There is nothing more fun than doing great work that gets accolades and sharing that experience with people you care about. Then, when

you've been doing this for a while, keep your eyes open for new people to the field—take them in and help them be part of the community as well.

About the author:

Liberty Munson is currently the principal psychometrician of the Microsoft Technical Certification and Employability programs in the Worldwide Learning organization. She is responsible for ensuring the validity and reliability of Microsoft's certification and professional programs. Her passion is for finding innovative solutions to business challenges that balance the science of assessment design and development with the realities of budget, time, and schedule constraints. Most recently, she has been presenting on the future of testing and how technology can change the way we assess skills.

Liberty loves to bake, hike, backpack, and camp with her husband, Scott, and miniature schnauzer, Apex. If she's not at work, you'll find her enjoying the great outdoors or in her kitchen tweaking some recipe just to see what happens.

Her advice to someone new to I-O psychology?

- Statistics, statistics, statistics—knowing data analytic techniques will open A LOT of doors in this field and beyond!

SIOF Award Winners: Meet the Winner of 2020 Early Career Award in Practice—Juliet Renee Aiken

Liberty J. Munson



As part of our ongoing series to provide visibility into what it takes to earn a SIOF award or grant, we highlight a diverse class of award winners in each edition of *TIP*. We hope that this insight encourages you to consider applying for a SIOF award or grant because you are probably doing something amazing that can and should be recognized by your peers in I-O psychology!

In this edition of award winner highlights, we recognize the winner of the Early Career Award in Practice—**Juliet Renee Aiken**, someone whose accomplishments early in career are more than many of us will accomplish in a lifetime!



Share a little a bit about who you are and what you do.

I wear several hats. In my consulting work, I've been a solo practitioner and most recently incorporated with colleagues into Conducere, an anti-oppressive consulting company focusing on transforming and aligning systems in organizations. In my other life, I created and run the master's program at the University of Maryland College Park, where my colleagues and I train practitioners of I-O psychology to be change agents in their organizations. In all parts of my professional work, I strive to create community, connection, and opportunity, particularly for those who are typically underserved.

Describe the research/work that you did that resulted in this award. What led to your idea?

Three different tracks of work were highlighted in my award application, specifically, (a) my work in the legal profession, (b) my work transforming a local government organization, and (c) my work within I-O psychology as a profession.

Within the legal profession, I conducted research to inform law center policy and counseling decisions, led research projects to provide actionable guidance to legal organizations, ran leadership executive-education programs for partners and senior associates, educated lawyers and law students on how to responsibly use empirical research to make evidence-based decisions at work and in their cases, and served as a statistical expert witness for the Department of Justice in a disparate treatment case. My work in the legal profession has been published in legal journals and other outlets, including a book on the traits and behaviors that lead to young-attorney success at law firms.

After my work at Georgetown Law, I transitioned to consulting for a local government organization, the Jefferson County Commission (JCC), to eliminate discriminatory, unethical, and unprofessional practices. These practices, unfortunately, persisted for 35 years despite a consent decree. The county's failure to meet the requirements of the decree resulted in a contempt finding in 2014, and the county went into receivership. I worked with the receiver and human resources to orchestrate change efforts throughout the county, including restructuring, staffing, and skilling up a professional and cutting-edge human resources department. By the conclusion of my work during the receivership, the county moved from having a receiver to having a monitor and is getting closer to release from the decree. During my work

with this organization, I and my colleagues won IPAC's 2017 Innovation in Assessment Award for developing legally compliant selection procedures quickly and at a low cost through synthetic validation.

Finally, I have been focused on diversity, inclusion, and opportunity within I-O psychology. I created and run the University of Maryland's MPS in I-O Psychology program. In 3 years, this program is now majority minority—60% of incoming students to the fall cohort are students of color. Within 2 years of its creation, the program was top ranked regionally and, in some measures, nationally, according to two *TIP* publications. I also launched a YouTube channel designed to bring I-O psychology to a broader audience (The I-O Soapbox—<https://www.youtube.com/TheIOSoapbox>) and spent several years working with the Committee for Ethnic & Minority Affairs (CEMA) in SIOP, spearheading an initiative to develop pipelines into I-O psychology from HBCUs and HSIs.

What do you think was key to you winning this award?

I am tremendously fortunate to have worked with, been mentored by, and received opportunities from amazing people. Without them believing in me, advising me, supporting me, and giving me opportunities, I would not be doing the work I am doing, and I would not have won this award.

What did you learn that surprised you? Did you have an “aha” moment? What was it?

As just one example, when I started working at Georgetown Law, I really began to understand the critical role of context—not in terms of moderating variables but in terms of industry and sector. There are entire theories in I-O that just don't make a lot of sense within law firms simply because of how law firms work and are structured.

What do you see as the lasting/unique contribution of this work to our discipline? How can it be used to drive changes in organizations, the employee experience, and so on?

Through others, we can leave a lasting impact. By training students, coaching clients, and supporting colleagues, I am able to make more of a lasting contribution than I would through my independent work. The people make the place, or in this case, the profession. My work is just part of a movement to leverage I-O for change beyond private-sector organizations in the United States (nonprofits, government organizations, volunteer, faith based, internationally) and to open doors and improve access to I-O and within I-O.

How did others become aware of your award-winning work/research?

I talk about it. I spent years hoping that someone would broadcast my work before I realized that I needed to advocate for myself. It still feels uncomfortable. I now see looking for outlets to broadcast the work I'm involved with and to build community with like-minded I-Os (and others in other disciplines) as a central part of the work I do.

Who would you say was the biggest advocate of your research/work that resulted in the award? How did that person become aware of your work?

There has been one incredible person who has consistently championed and promoted me, given me opportunities, and spoken well of me my entire career. He is the reason I am who I am today, and I will never lose my gratitude for the one and only **Dr. Paul Hanges**. He not only shaped the way I think and

approach my work, but he also consistently recommended me for projects and supported my various nominations. Hanges has always thought of my career for my benefit, rather than for his own, and I treasure his mentorship, his friendship, and himself as a colleague. Other key advocates have been Lorren Oliver, **Jim Outtz**, **Marc Sokol**, and my incredible students and alumni, among others. While I've learned how to keep pushing when I know I'm onto something, I'm also grateful for my deep and growing community of incredible I-Os who keep me pumped to do the hard work daily.

To what extent would you say this work/research was interdisciplinary?

I have always tried to stay plugged in to other disciplines. I work with lawyers, economists, and sociologists, and continue to read research and theory in these and other disciplines. I committed to I-O as a field in part because of how interdisciplinary it is at its best, and I never want to lose track of that interest and attraction.

Are you still doing work/research in the same area where you won the award? If so, what are you currently working on in this space? If not, what are you working on now, and how did you move into this different work/research area?

Yes, and then some! I continue to be motivated by my belief that the people make the profession and dedicate myself to diversifying and removing barriers to access/entry in the field of I-O. Since receiving this award, I've launched and supported the launch of communities within I-O, including the I-O Coffee House, The Otherwise Invisible Consulting group, the Fern Center for International Organisational Science, and biweekly program-director meetings for I-O program directors internationally.

In addition to community building, I've been working within the University of Maryland to provide advice and resources on anti-racist education and the transformation of graduate education. I've also continued my consulting practice, offering coaching and support in system transformation and alignment to enable the development of talent pathways that are deep and diverse.

What's a fun fact about yourself (something that people may not know)?

Before I turned to I-O, I was fully invested in arts and soccer. I won a silver medal in the Scholastic Arts & Writing competition for a painting of my sister, played on a number of competitive soccer teams, and published several poems. My artistic streak didn't fully disappear once I entered the field—I've written a children's book framed through statistics called *Positively Skewed* that is available on Amazon.

What piece of advice would you give to someone new to I-O psychology? (If you knew then what you know now...)

You will likely be told to specialize. When I received this advice, I thought that meant that I had to limit my interests and activities. What I've learned it means is that you need to learn how to tell your own story. Even if your story looks messy to you from the inside, you need to find the common threads, the things that tie it together, and tell that story to others as cleanly and clearly as possible. Specialization is often about framing. If you have diverse interests, that's wonderful—just find the string that pulls them all together and keep your focus, your energy, and your effort there.

Liberty Munson is currently the principal psychometrician of the Microsoft Technical Certification and Employability programs in the Worldwide Learning organization. She is responsible for ensuring the

validity and reliability of Microsoft's certification and professional programs. Her passion is for finding innovative solutions to business challenges that balance the science of assessment design and development with the realities of budget, time, and schedule constraints. Most recently, she has been presenting on the future of testing and how technology can change the way we assess skills.

Liberty loves to bake, hike, backpack, and camp with her husband, Scott, and miniature schnauzer, Apex. If she's not at work, you'll find her enjoying the great outdoors or in her kitchen tweaking some recipe just to see what happens.

Her advice to someone new to I-O psychology?

- Statistics, statistics, statistics—knowing data analytic techniques will open A LOT of doors in this field and beyond!

Laissez Le Bon Temps Rouler! Attend SIOP's Virtual Consortia Events!

SIOP Consortia Committee



Calling All Early Career Faculty! Early Career Practitioners! Doctoral Students! Master's Students!

Attend SIOP's Early Career Faculty Consortium

The Early Career Faculty Consortium (ECFC) invites current and future early career faculty in departments of psychology and management to participate in career-focused activities and sessions. The program will feature an opportunity for **networking** with early career faculty members from a diverse array of institutions as well as senior faculty presenters who will share their respective research paths and stories about how they navigated their academic career.

The 2021 Early Career Faculty Consortium will focus on **mentoring and the art of successful teaching, using startup funds and data-collection strategies, generating and evaluating new research ideas, and surviving and thriving through the tenure-and-promotion process. This year will also feature a virtual happy hour with fellow attendees.** These sessions will include previous winners of the SIOP Distinguished Teaching Contributions Award, faculty who have recently gone through the tenure-and-promotion process, and faculty who have successful mentoring relationships.

Because the success of the Early Career Faculty Consortium comes from interactive sessions with invited speakers, attendees are encouraged to prepare questions prior to attending. Many attendees choose to attend the consortium multiple times to capitalize on new programming and information presented in subsequent years.

Who Can Attend?

If you (a) are a PhD student who has successfully proposed their dissertation, (b) are seeking an academic position for the fall 2021 term, or (c) have accepted an academic position offer for fall 2021, then you are eligible to participate.

What's the Experience Like?

The discussions will be 100% virtual and will be conducted prior to the beginning of the 2021 SIOP Conference.

Spots are limited; registration for this consortium is available when registering for the SIOP conference, so register early. We look forward to seeing you there!

For further information: <https://www.siop.org/Annual-Conference/Consortia>

Or contact ECFC Cochairs **Megan Nolan** (mnolan@wcupa.edu) or **Andrea Hetrick** (ahetrick@unm.edu).

Attend SIOP's Early Career Practitioner Consortium!

Are you interested in how to set yourself up for career success?

Are you interested in springboarding your career in a virtual environment?

Do you want to connect and receive mentoring from successful I-O practitioners?

Join us for SIOP's Early Career Practitioner Consortium

Early career practitioners often find themselves navigating challenging realities of the working world not covered in many graduate programs, even more so when navigating early careers virtually. It's common to be uncertain about your career early on. The Early Career Practitioner Consortium (ECPS) will share insights for identifying and leveraging your strengths or areas of development in your current work and will connect you with accomplished I-O practitioners who can share their wisdom and guidance to propel your career forward.

Who Can Attend?

This 1-day career development experience is for current I-O practitioners pursuing nonacademic careers, with *no more than 5 years of work experience after their MA or PhD*.

What's the Experience Like?

- Keynote presentation on creating a career plan that places your well-being at the center.
- Receive guidance on common challenges faced when starting a career in the virtual working world.
- Interact with seasoned I-O practitioners in mentoring and panel conversations.
- Explore career trajectories through networking and peer coaching in small groups.

The ECPC is here to start an ongoing conversation among I-O practitioners through the SIOP conference. It will be held on **Friday, April 9, in a 100% virtual format**. Submit your application today!

For further information: <https://www.siop.org/Annual-Conference/Consortia>

Or contact ECPC Cochairs **Rob Stewart** (rstewamz@amazon.com) or **Stephanie Murphy** (stephanie.murphy@dell.com).

Attend the Lee Hakel Doctoral Consortium!

Join us for the SIOP 2021 virtual Doctoral Consortium. You can expect a high-quality and interactive consortium experience with a diverse set of I-O professional panelists. Come engage with panelists as they offer unique perspectives on the opportunities and challenges faced by both I-O practitioners and academics today. Each virtual session will offer breakout discussions to help you network with panelists and other students.

The Doctoral Consortium offers two tracks: applied and academic. Topics include surviving the dissertation, navigating the job process, creating an elevator pitch, generating new research ideas, and learning from editors at top journals.

For students attending the conference in person, we will provide a list of recommended sessions to engage in, and there you can meet other consortium participants.

Who Can Attend?

Each program can nominate up to two student representatives. Students must have passed comprehensive exams (or your program's equivalent) to be eligible to attend. Space is limited, so register now. If you are interested, be sure to let your program chair know and/or indicate your interest via a form provided when registering for SIOP.

What's the Experience Like?

The discussions will be 100% virtual and will be conducted prior to the beginning of the 2021 SIOP Conference.

For more information, contact Doctoral Consortia Cochairs **Emily Hunter** (emily_m_hunter@baylor.edu) or **Elliott Larson** (elliott.c.larson@gmail.com).

Attend SIOP's Virtual Master's Consortium!

Would you like to meet I-O practitioners from companies like Google, Hogan, Comcast, and the federal government? If you are a current student in a master's degree program and want to learn more about career options and networking with fellow students and I-O professionals, make sure to add the Master's Consortium to your preconference agenda! The Master's Consortium is a development and networking event that includes a diverse set of master's level I-O professionals who offer unique perspectives on the opportunities and challenges faced by I-O practitioners today. Speakers will focus on the key developmental experiences that can lay the groundwork for a successful career in I-O psychology with a master's degree, including topics like

- Nailing your interview
- Using data analytics and visualization techniques to drive change in organizations
- Career options with an I-O master's degree
- Using your network and getting involved

Who Can Attend?

This year is open for any master's student to register for the consortium.

What's the Experience Like?

The consortium is highly participative and includes formal presentations by I-O practitioners, Q&A with our speakers, informal virtual networking opportunities with students from master's programs across the country, and so much more! Our already impressive list of speakers for 2021 includes

- Dalyn Allen, MS: HR analyst at DCI Consulting Group, Inc.
- Tyra Gray, MA: senior HR business partner at Samsung Electronics America
- Destiny Mercado, MA: personnel research psychologist at U.S. Federal Emergency Management Agency (FEMA)
- **Rachel Reichman**, MA: certification exam development manager at Google
- **Cody Warren**, MA: Talent Analytics consultant at Hogan Assessment Systems

Please visit the [SIOP Consortia](#) page for forthcoming registration and schedule details.

Or contact Master's Consortia Cochairs **Matisha Montgomery** (Matisha.D.Montgomery@hud.gov) or **Christopher Rosett** (Christopher_Rosett@comcast.com)

10 Fun Facts About SIOP's Membership From 2020!

Victoria Lykins, SIOP Membership Committee Communications

Throughout the year, the SIOP Membership Committee conducts analyses on the data collected through membership surveys and [member profiles](#). This information is used to track membership trends that inform decisions about member benefits, investment areas, and SIOP events such as future conference sites. As we look to the future, our aim is to collect more data to build location specific networking events, help inform diversity and inclusion (D&I) campaigns, identify student member hubs, and identify potential I-O job hubs.

To clarify, the term *members* encompasses all membership types in SIOP (Member, Associate, Student Affiliate, Fellow, and Retired) and the term *Member* encompasses individuals who hold a doctoral degree or Associates who upgraded to Member after meeting a few other criteria, which can be found [here](#).

As we look back on our findings from last year, we wanted to share 10 fun facts we collected based on membership data in 2020.

Enjoy these top 10 fun facts of 2020!

1.

Student Affiliates were the largest membership type and accounted for 40% of our membership. The second largest membership group were Members who account for 34% of the total membership, followed by Associates who made up 19% of all SIOP members.

2.

In 2020, the highest degree earned by a majority of our members was a doctoral degree. Over 60% of members had or were pursuing a PhD (3,210 Members, 1,607 Student Affiliates, 318 Fellows, 313 Associates, and 293 Retired members), followed by 25% of members who had or were pursuing a master's degree (1,910 Student Affiliates, 1,387 Associates, 35 Members, and 21 Retired members) and 5% of members with a bachelor's degree (434 Student Affiliates).

3.

The top reported member sectors included the private sector, academic sector, and government. In the private sector, the most popular areas were consulting firms and independent practices. In the academic sector, the most popular areas of focus were business schools or department and psychology departments.

4.

Of those who indicated their work sector, roughly 38% of members were in academia, 53% were in the private sector, and 8% were in government, with the rest being retired or in another sector.

5.

Our members are invested in SIOP—Over 40% of SIOP’s members have been long-standing SIOP members for over 5 years in a row (includes 4,097 individuals). Data were reviewed from 2016–2020.

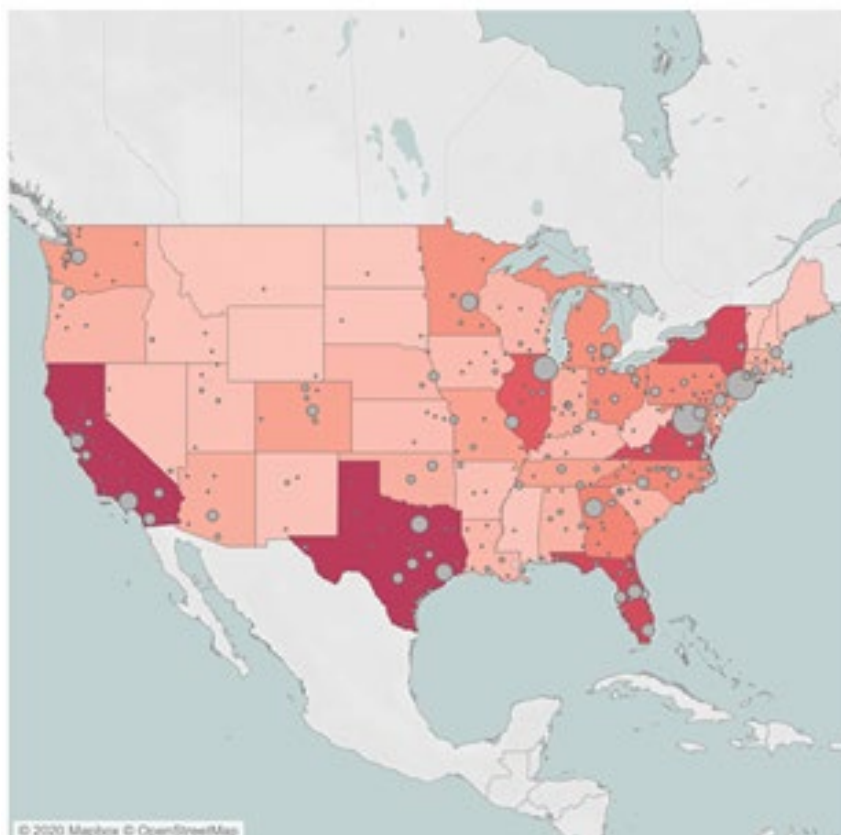
6.

SIOP members with the highest retention were those working in the field for 20–30 years—82.5% of those members remained with SIOP for at least 4 years.

7.

The US states with the highest concentration of SIOP members in 2020 were California (9%), Texas (9%), Florida (7%), New York (7%), Virginia (7%) and Illinois (6%).

2020 Location - Metro Areas



Top Metro Areas

Metro Area Name	
Washington-Arlington-Alexandria, DC-VA-MD-WV MSA	734
New York-Northern New Jersey-Long Island, NY-NJ-CT MSA	664
Chicago-Naperville-Joliet, IL-IN-WI MSA	448
Non-Metropolitan Area	368
Los Angeles-Long Beach-Santa Ana, CA MSA	256
Atlanta-Sandy Springs-Marietta, GA MSA	243
Dallas-Fort Worth-Arlington, TX MSA	227
Minneapolis-St. Paul-Bloomington, MN-WI MSA	215
Houston-Sugar Land-Baytown, TX MSA	214
Orlando-Kissimmee, FL MSA	156
Seattle-Tacoma-Bellevue, WA MSA	155
San Francisco-Oakland-Fremont, CA MSA	147
Detroit-Warren-Livonia, MI MSA	143
Miami-Fort Lauderdale-Pompano Beach, FL MSA	143
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA	130
St. Louis, MO-IL MSA	127
Baltimore-Towson, MD MSA	126
San Diego-Carlsbad-San Marcos, CA MSA	114
Boston-Cambridge-Quincy, MA-NH MSA	106
Charlotte-Gastonia-Concord, NC-SC MSA	105
Tampa-St. Petersburg-Clearwater, FL MSA	102
Denver-Aurora, CO MSA	93
Phoenix-Mesa-Scottsdale, AZ MSA	92
San Antonio, TX MSA	85
Raleigh-Cary, NC MSA	83
Austin-Round Rock, TX MSA	80
Portland-Vancouver-Beaverton, OR-WA MSA	80
Cleveland-Elyria-Mentor, OH MSA	75
Pittsburgh, PA MSA	74
Cincinnati-Middletown, OH-KY-IN MSA	73
Omaha-Council Bluffs, NE-IA MSA	66

8.

International membership makes up 12% of SIOP membership. In 2020 the top countries in terms of membership outside of the US were Canada (251 members), Australia (120 members), United Kingdom (90 members), Germany (69 members), and Singapore (54 members).

2020		
Country	n	%
Canada	251	23%
Australia	120	11%
United Kingdom	90	8%
Germany	69	6%
Singapore	54	5%

9.

Residents from Canada, Australia, the United Kingdom, Germany, Malaysia, Singapore, and China were the most common international conference attendees. Global presence at the SIOP Annual Conference was most prevalent in 2018, when the conference was held in Chicago, IL.

10.

According to the results from the [2018 Membership Survey](#), 84% of all respondents reported Strongly Agreeing/Agreeing with the engagement items (the level of satisfaction, advocacy, pride, and commitment members reported feeling for SIOP). This is a very strong result as compared to typical organizational engagement.

Interested in more fun stats? Let your voice be heard and help shape the future of SIOP!

This month you will receive an email request to complete the SIOP Membership Survey. This survey is only conducted once every 3 years, so make sure your voice is heard. This is your chance to contribute to the SIOP value proposition and to improve the member experience. When you receive the email request, please take the time (under 20 minutes) to respond. If everyone participates, we will have even more great membership data trends to share!

If you enjoyed those findings, be sure to encourage your SIOP friends to complete their membership profiles within SIOP.org. If everyone adds their updated information, the Membership Analytics Subcommittee will be able to present even more insightful facts next year!

Have SIOP membership data requests for your committee or research efforts? Submit your request [here](#) and be sure to review our latest [Membership Data Governance Policy](#).

Filling out Your Demographic Information

- Log into your account at [siop.org](#)
- In the top right corner click *My Account* and then *Manage My Account*
- Under *Account Actions* on the right-hand side, choose *Edit Demographic Information*
- Update your information and click *Save* at the bottom of the page

Blacks in I/O

David Geller, Anna Erickson, and Denis Ochieng

They say timing is everything, and that sometimes someone comes along just when you need them most. This month the SIOP Local I-O Group Relations Committee highlights **Blacks in I/O**, a recently founded local group that is making a timely national impact.

As I-O psychologists, we seek to improve the workplace experiences for all by promoting inclusivity, voice, and fairness. Yet only 4% of SIOP's members identify as "Black/African American" according to a membership survey conducted in 2018. Similarly, only 3% of respondents to the [2019 post-annual conference survey](#) self-reported as "African, African-American." This vast underrepresentation struck Macy Cheeks and Shavonne Holman while attending their first SIOP conference in 2015 and across the next 4 years where little seemed to change.



As a result, Cheeks and Holman decided it was time to act. Following the 2019 SIOP Conference near Washington, DC, they formed [Blacks in I/O](#), first as a LinkedIn networking group, then as a local I-O group in the greater Washington, DC area, and now as an organization with a national footprint and ambitious goals.

"*Blacks in I/O* psychology is an organization committed to changing what the I-O industry looks like . . . in building a pipeline and [creating] opportunities for Black and African American professionals to break into the industry," Holman recently told Ben Butina on the September 30, 2020 episode of his Department 12 podcast. "We just reached over 1,000 followers on Instagram [[@blacksinio](#)] . . . We are just so honored and appreciative of all the love and support that we've gotten over the past year. We're just grateful, and we're open and welcoming to anyone who wants to help us achieve our goals."

So, what exactly is *Blacks in I/O*, why does it exist, and how can you get involved? First, it's important to understand their backstory.

Founders' Story

Holman and Cheeks attended Howard University together, a prestigious historically black university, where both were psychology majors yet neither even heard about I-O during their undergrad journey. Though they parted ways after graduation, they both independently determined that their respective career paths were not matching their passions in life and sought out new direction. By happenstance each stumbled upon I-O, felt a pull to the field, and pursued and completed a master's degree. Awesome, right!? Well, yes and no.

During grad school, Cheeks and Holman both encountered experiences that gave them pause. For example, in class they felt social pressure to act and talk a certain way so that their peers and professors would treat them the same as everyone else. They felt the need to answer questions in the “right” way to be perceived as equally intelligent as their non-Black counterparts. Though they went to a noteworthy undergraduate university, they didn’t feel as knowledgeable as their white counterparts, many of whom already possessed foundational knowledge of the field from their intro-to-I-O courses or some other form of exposure. “I felt like I was at a disadvantage in my graduate program,” says Holman. “I went to Howard University, you know a great university . . . Why is it that I didn’t feel as equipped and prepared in this program as my other classmates?”

Cheeks describes a specific experience with a committee member while proposing her master’s thesis who asked her to remove one small section on the history of White privilege because “it was not proven, it was not scientific, and there was nothing to back up that it was a true phenomenon,” she recalls. “And I was shocked. I think that’s why it’s important that there are Black people, or people who understand the nuances of diversity to be in these spaces. Whether it’s as students or as professors, just making sure that the experiences that Black folks go through on a day-to-day are acknowledged in our curriculum and in the teachings of I-O.”

With these events already shaping their experience within the field of I-O, they headed to the 2015 Annual SIOP Conference where they noticed that they were among the very few Black people there. They had virtually the same conversation at the 2019 SIOP Conference, so they decided to do something about it, giving birth to what has now become *Blacks in I/O*.

Initially they just sought to bring together all the Black people in the field through a LinkedIn group. They invited everyone they could think of, they scanned SIOP’s social-media user list, and they tried to be as resourceful as possible. However, that quickly grew into a “local group” that began meeting every other month in the DC Metro area over professional-development and networking events organized by Holman and Cheeks. When the COVID-19 pandemic hit, they pivoted to maintain the momentum, moved to the virtual environment, and opened it up to others outside of the local region. Seemingly overnight they began to see event registrations skyrocket to 800 people around the country.

Cheeks and Holman attribute this level of involvement and attention to being at the right place at the right time with the right idea. However, it’s a bit more than that as well. These women were able to read the room and have worked hard to deliver a socio-politically on-time response. Regardless of how you look at it, as Butina comments, “What started as a LinkedIn group became a pretty big deal.”

Now Cheeks and Holman have taken *Blacks in I/O* to the next level and are in the process of formalizing it as an official nonprofit organization. As stated on their website, their established mission is “To uplift Black voices and experiences within the industrial-organizational psychology industry through continued education, mentorship, networking, and awareness-building. We curate events and products addressing disparities unique to the Black community.”

Call-out box 1: *Blacks in I/O* goals

- Foster a community of diverse I-O academics and practitioners
- Increase the presence of African Americans in the I-O industry
- Increase awareness of the I-O industry at educational institutions nationwide, especially minority-serving institutions

- Build a pipeline of diverse and informed I-O candidates
- Promote a nationwide understanding of the unique experiences that African Americans face in the workplace and serve as a vehicle to enable conversations and evidence-based solutions
- Empower and equip our members with the tools, language, and resources to address disparities unique to minorities

Membership

The group welcomes anyone who is interested in supporting their efforts, and it offers three different membership levels: *student and student ally*, *professional and professional ally*, and *honored professional*. Their website details each membership level, and all membership levels come with access to a rich index of resources on diversity and inclusion.









Community Impact

Despite its short history, *Blacks in I/O* is already actively driving the impact it seeks through its member-led committees (membership services and engagement, volunteer and *pro bono* projects, social media marketing and communications, business development and partnerships, and special projects). They are also building and maintaining partnerships with I-O-related groups and organizations such as PTC/MW and The Otherwise Invisible Consulting group.

Call-out box 2: The Otherwise Invisible Consulting group is a pro bono consulting organization supporting businesses and individuals who otherwise would not have access to such services.

The group's **Law Enforcement Task Force** formed after the first community call and has hit the ground running. The 25 task-force members are working hard to produce the first of its white paper series on selection and assessment in law enforcement.

Call-out box 3: Law Enforcement Task Force

Purpose: The purpose of the *Blacks in I/O* Law Enforcement Task Force is to combine efforts from multidisciplinary professionals to address the systemic societal issues of racism and bias, and how they are manifested in law enforcement. Together we will plan and strategize ways to use our professional expertise to make an impact for the Black community.

Scope: The task force, and its partner organizations, shall be representative of the expertise required to guide and support policing reform. Members of the task force should include personnel with the capacity and capability to achieve the organization's agenda.

Partnering organizations could include those with expertise in

- police executive organizations (i.e., NOBLE)
- criminal justice/legal
- mental health support groups
- policy writers/equity advocacy groups
- community-based organizations

Cheeks and Holman also have begun to conduct outreach with HBCUs, starting with Howard University, where they have presented an intro to I-O with undergrads in psychology courses. Next, they aim to partner with schools like Morgan State University, Coppin State University, University of Maryland Eastern Shore, and Spellman College. Although the short-term goal is to promote awareness through presentations, they hope to permanently influence undergrad curricula to include I-O as a topic at minority-serving institutions.

Blacks in I/O also is in the process of forming a mentorship program. They are currently looking for participants, both mentors and mentees.

A look at their 2020 activity, where they held over a dozen events, gives promise for an exciting 2021. The group is using the winter to plan for 2021 programming, on top of the ongoing initiatives.

From a longer term vantage point, Cheeks and Holman hope to continue growing the group's national footprint, eventually to create their own conference focusing on these issues and to continue identifying ways they can create a more fair, equitable, and inclusive community. They also intend to find ways to work in a more formal capacity with the SIOP organization, and they aim to influence SIOP conference programming to be more representative and reflective of their realities.

How You Can Help

So how can you support *Blacks in I/O*? Says Cheeks, "If you want to help, if you want to have hands-on interaction with the day-to-day of *Blacks in I/O*, we are always accepting committee members. So we'd ask that you navigate to our website, join our team where we have a detailed list of each of our committees and what they do. Then you can apply to help. It's a volunteer base, but these committees really help drive all of the work that you see. [Also] if you wanted to donate, we have a Donate button down at the bottom, and you can donate whatever amount you decide, one dollar, ten dollars, everything helps us in just setting up infrastructure, like our website, email accounts for our committee members, maintaining zoom accounts, and different things like that."

This is the time to get involved. Go navigate over to their website, request to become a member, join a committee, donate if you can, check out the resources they offer, do something. Let's come together as an industry, as a community, as an I-O family, and let's all be part of the solution.

Call-out box 4: Lessons learned in creating *Blacks in I/O*:

Take help when it's offered. Don't let pride get in the way.

Don't grow overly anchored on your original idea. Be open to adapting, because as your group becomes more widely known, you will hear a variety of perspectives. Create the group that best serves the people, not that just best serves your original idea.

Is That Ethical? The Current State of Industrial-Organizational Psychology Graduate Training in Ethics¹

Rebecca M. Brossoit
Colorado State University

Jacqueline R. Wong
Colorado State University

Faviola Robles-Saenz
Colorado State University

Larissa K. Barber
San Diego State University

Tammy D. Allen
University of South Florida

Thomas W. Britt
Clemson University

The field of psychology has a long history of ethical issues related to the treatment of human participants and nonhuman animal subjects. In recent years, the field has continued to be scrutinized for ethical issues (e.g., scientific fraud, sexual harassment). By 1953, the first version of the APA Ethics Code was created (Smith, 2003), and currently, the APA Ethics Code includes five general ethical principles (i.e., beneficence and nonmaleficence, fidelity and responsibility, integrity, justice, and respect for people's rights and dignity), alongside the detailed Ethical Principles of Psychologists and Code of Conduct, intended to ensure that psychologists are upholding their responsibility to "improve the conditions of individuals, organizations, and society" (APA, 2017, p. 3).

Relevant to the specific area of industrial-organizational (I-O) psychology, recent highly publicized scandals in business and government (e.g., Facebook and Cambridge Analytica's involvement in the 2016 Trump campaign) also highlight extreme instances of unethical behavior. Even less egregious ethical dilemmas can cause distress to those navigating how to respond and to individuals who are impacted by those decisions. With often competing demands (e.g., worker rights, worker health and safety, company profits, goals of management), an understanding of ethics and how to address potential ethical dilemmas is critical for individuals in the field of I-O psychology, especially given the diverse occupations held by individuals with I-O degrees (e.g., research, teaching, consulting, executive coaching, government work). Relatedly, Lefkowitz (2008) has argued for the adoption of a scientist-practitioner-humanist model, in which values of social justice and fairness are balanced alongside traditional bottom-line business objectives and research training. In this way, operating from a humanist model would mean that I-Os question whether something is the right thing to do as often as asking whether something is valid and cost effective (Lefkowitz, 2008).

Incorporating ethics training in graduate programs is one way for I-O academics and practitioners to learn about and uphold the field's proclaimed values. Further, training in ethics may enable I-Os to effectively navigate ethical issues both in the field (e.g., consulting practices) and in more tangential areas (e.g., corporate social responsibility, organizations' involvement in politics). SIOP includes "Ethical, Legal, Diversity, and International Issues" as the first competency in the *SIOP Guidelines for Education and*

Training in Industrial-Organizational Psychology (referred to as the *SIOP Guidelines* hereafter; SIOP, 2017). The placement of these topics among the other foundational competencies (e.g., fields of psychology, research methods, history of psychology) signals the importance of training I-O graduate students on ethics. Moreover, in a recent survey of graduate program directors in I-O and related fields, “ethical, legal, and professional contexts of I-O psychology” was deemed one of the most essential competencies for students to learn in both master’s and PhD programs (Payne et al., 2015). However, individuals in our field have called attention to the need for effective teaching of ethics, in which ethical behavior is impacted (e.g., Naidoo, 2020). This study was conducted to gather information about the methods and extent of ethics training in I-O graduate programs, with an emphasis on graduate coursework.

Method

In the spring of 2020, program directors from master’s and doctorate I-O graduate programs were emailed with invitations to participate in a 10-minute survey regarding the curriculum and educational requirements in their I-O program. Graduate programs in psychology departments were identified using the *Graduate Training Programs in I-O Psychology and Related Fields* search engine on the SIOP website. Next, the email addresses of I-O program directors were obtained from the SIOP website and cross-referenced with information provided on university websites. In the event that program director information was not up to date on these websites, recruitment messages requested that those who were not program directors forward the survey to an individual who would be better suited to complete the survey. Broadly, survey questions asked about graduate training in ethics (particularly coursework in ethics), as well as perceptions of the preparedness of students to address ethical issues and the extent to which graduate training in ethics is valued within programs.²

Results

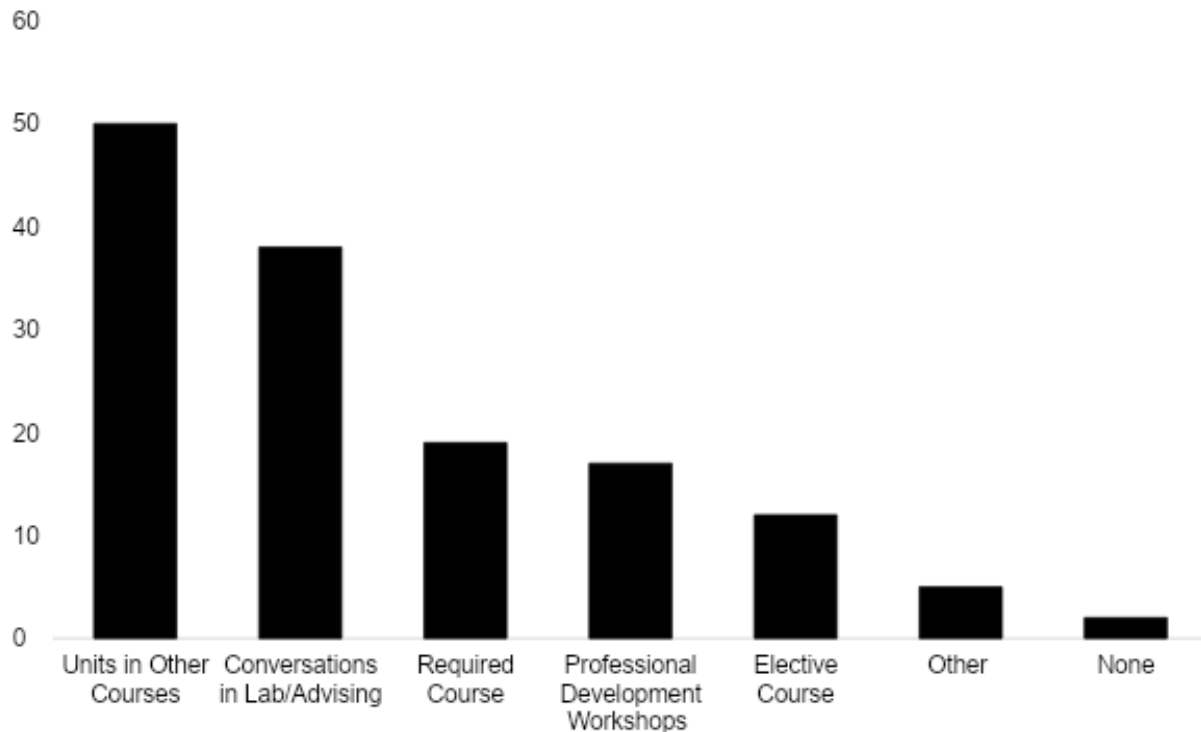
The survey response rate was 50% (i.e., 143 I-O program directors were contacted and 71 participated). Participants represented master’s (63%), PhD only (15.5%), and combined master’s/PhD (32%) programs,³ primarily from the United States (86%), and conducted (prior to COVID-19) primarily in-person (68%) compared to online (4%) or a hybrid of in-person and online (20%).⁴

Training Methods

Less than half of I-O graduate programs (44% of all I-O programs; 42% of master’s programs and 35% of PhD programs⁵) offer a course on ethics. Specifically, 27% of I-O graduate programs (24% of master’s programs and 23.5% of PhD programs) offer a required ethics course, and 17% (18% of master’s programs and 12% of PhD programs) offer an elective ethics course. Required ethics courses range from 1–4 course credits ($M = 2.44$ credits), and elective ethics courses range from 3–4 credits ($M = 3.09$). In about half (47%) of programs with a required ethics course, and in a quarter (25%) of programs with an elective ethics course, students typically take the course early (e.g., in the first year) of their degree program. Seventy percent of I-O graduate programs (73% of master’s programs and 68% of PhD programs) incorporate ethics in other courses. Finally, about half of I-O graduate programs incorporate graduate training on ethics in conversations in lab and/or advising meetings (53.5%), and some incorporate graduate training on ethics in professional development workshops (24%). See Figure 1.

Figure 1

Methods for Training Ethics in I-O Graduate Programs



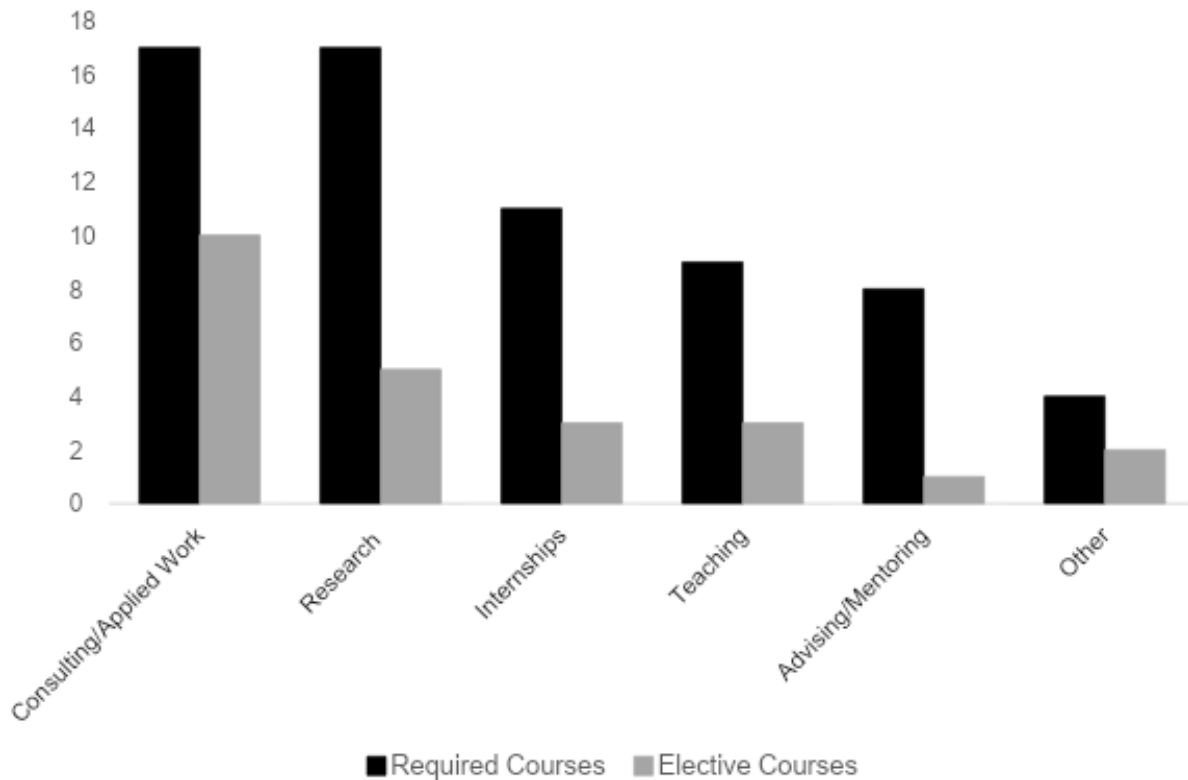
Note. Figure depicts responses from all types of programs (i.e., master's only, PhD only, and master's/PhD combined). The y-axis reflects count data.

Content of Coursework

The topic areas covered in required ethics courses include research (89%), consulting/applied work (89%), internships (58%), teaching (47%), advising/mentoring (42%), and other topics (e.g., diversity, employment law, general professionalism; 21%). The topic areas covered in elective ethics courses include research (42%), consulting/applied work (83%), internships (25%), teaching (25%), advising/mentoring (8%), and other topics (e.g., business ethics; 17%). See Figure 2. Seventy-four percent of required ethics courses are I-O program specific (i.e., taught by I-O faculty and/or dedicated to I-O ethics issues), and 21% are general (i.e., span different disciplines of psychology and/or are taught by non-I-O faculty), whereas 58% of elective ethics courses are I-O program specific, and 33% are general. For programs that incorporate ethics into other courses, these include research methods courses (92%), core I-O courses (72%), professional skills courses (54%), practicum courses (34%), history courses (2%), and other courses (e.g., statistics, employment law; 8%).

Figure 2

Topics Covered in Required and Elective Ethics Courses in I-O Graduate Programs



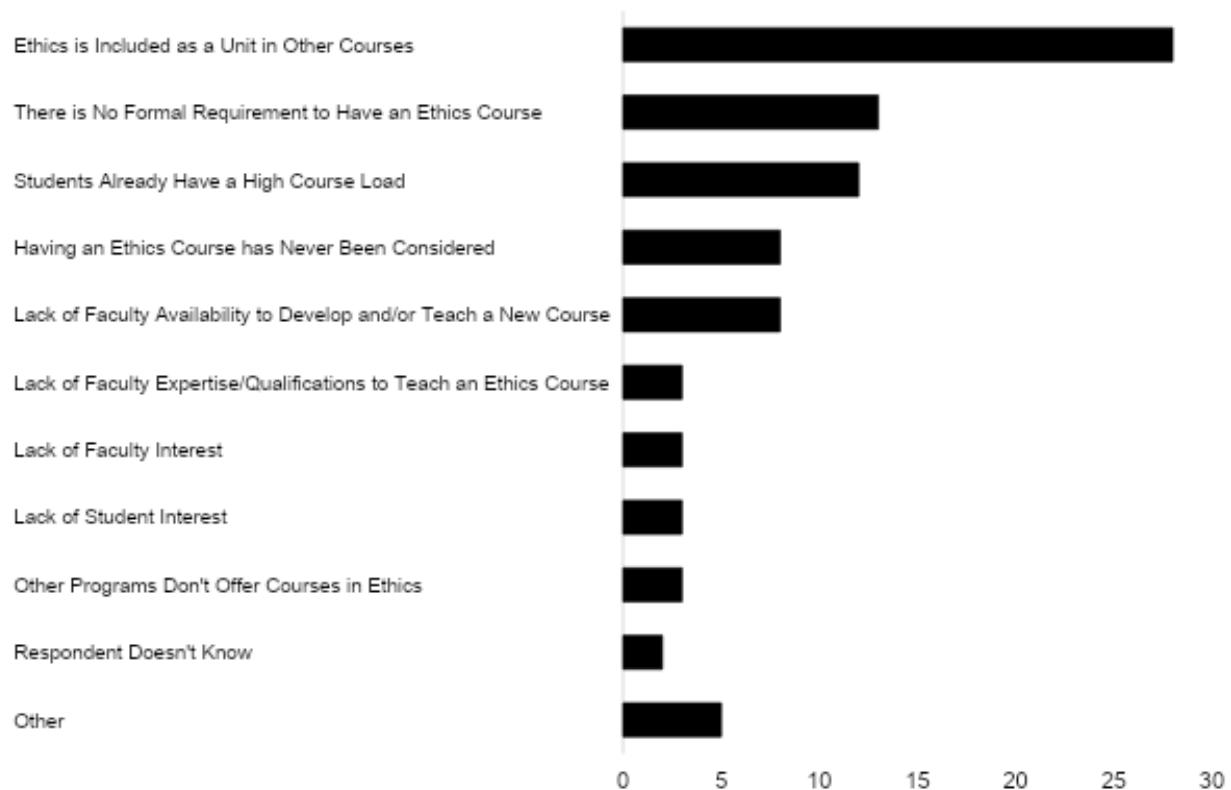
Note. Figure depicts responses from all types of programs (i.e., master's only, PhD only, and master's/PhD combined). Of the 71 respondents, 19 indicated that their program offered a required ethics course, and 12 indicated that their program offered an elective ethics course. The y-axis reflects count data.

Reasons for Not Offering Ethics Courses

Fifty-six percent of I-O graduate programs (58% of master's programs and 65% of PhD programs) do not offer required or elective ethics courses. These are the reasons for not offering an ethics course: Ethics is included as a unit in other courses (70%), there is no formal requirement to have an ethics course (32.5%), students already have a high course load (30%), lack of faculty availability to develop and/or teach a new course (20%), having an ethics course has never been considered (20%), lack of student interest (7.5%), lack of faculty interest (7.5%), lack of faculty expertise/qualifications to teach an ethics course (7.5%), other programs don't offer courses in ethics (7.5%), other reasons (e.g., ethical issues are discussed as they arise; 12.5%), and 5% of program directors did not know the reason why an ethics course was not offered in their program. See Figure 3.

Figure 3

Reasons for Not Offering Ethics Coursework in I-O Graduate Programs



Note. Figure depicts responses from all types of programs (i.e., master's only, PhD only, and master's/PhD combined). Of the 71 respondents, 40 indicated that their program did not offer either a required ethics course or an elective ethics course. Only those 40 responded to this question. The x-axis reflects count data.

Preparedness of Students

Most program directors think graduates from their I-O program are sufficiently prepared⁶ to address ethical issues in research (69%), about half think graduates are sufficiently prepared to address ethical issues in consulting/applied work (58%) and internships (50%), and less than half think graduates are sufficiently prepared to address ethical issues in advising/mentoring (39%) and teaching (28%).

Program Values

Overall, program directors perceive that their I-O program values graduate training in ethics in research (95% agree⁷, consulting/applied work (87% agree), internships (85% agree), advising/mentoring (76% agree), and teaching (72% agree).

Discussion

Implications

An understanding of ethics is critical in psychology broadly and is also uniquely important in the field of I-O. Unsurprisingly, the value of graduate training in ethics, especially related to research, is widely agreed upon in I-O graduate programs. One of the ways that the importance of ethics can be communicated to graduate students is to offer coursework on the topic. However, less than half of I-O graduate programs offer an ethics course. Further, offering ethics coursework early in students' degree progression (e.g., the first year of a graduate program) can also signal the value of ethics. Currently, about half of required ethics courses are taken early in students' degree progression, though only a quarter of elective ethics courses are taken early. Although most programs do not offer ethics-specific courses, ethics are typically covered as units in other courses. Relatedly, inclusion of ethics in other coursework is the most common reason for not offering a separate ethics course, followed by there not being a formal requirement, and students already having a high course load.

Research and consulting/applied work are the most common topic areas that are covered in ethics-specific coursework, and nearly all programs incorporate ethics in research methods courses. Fittingly, we found that most program directors believe that graduates from their program are sufficiently prepared to address ethical issues in research, followed by about half who believe graduates have sufficient preparedness in consulting/applied work and internships. However, perceptions of sufficient preparedness of graduates to address ethical issues in advising/mentoring and teaching are low. Given that these topics are also less common in ethics courses, it may be appropriate to incorporate advising/mentoring and teaching ethics in courses and/or in other training modalities (e.g., supervised experience, role modeling; SIOP, 2017).

For programs that are interested in expanding their curriculum to include an ethics course, SIOP's Committee for the Advancement of Professional Ethics (CAPE; Knapp & Lefkowitz, 2018) provides online resources (e.g., syllabi, reading lists, ethical dilemma scenarios), and there are a number of textbooks and book chapters specific to ethics in I-O (e.g., Lefkowitz, 2012, 2013, 2017). Of note is that the APA Ethics Code is currently being assessed and revised (APA, 2018). Given that SIOP has adopted the APA Ethics Code as our profession's ethics code (and members agree to adhere to the Ethics Code regardless of their affiliation with APA), graduate training should reflect upcoming revisions that are made to the APA Ethics Code.

Limitations and Future Research

Our survey had a 50% response rate, raising the possibility that the program directors who responded may have stronger opinions regarding ethics and represent programs more likely to address ethics. Therefore, the percentage of I-O programs with ethics courses may be lower than presented in the present article. Having responses from the remaining half of programs who did not respond would provide a clearer picture of how I-O graduate programs are training students on ethics. We also decided to focus on I-O programs within psychology departments but recognize that there are closely related programs in other departments (e.g., business). Therefore, future work could explore the extent to which graduate students in related disciplines receive ethics training. Additionally, the focus of this study was primarily on ethics courses but revealed that graduate training is also occurring in professional development workshops as well as in lab and advising meetings. It would be useful to understand more about the content of these workshops and discussions.

In line with this, the SIOP *Guidelines* recommend that ethics training occur not only in formal coursework but also through supervised experience and field research, on-the-job training, modeling/observation, involvement in funded research, and collaborative research (SIOP, 2017). Researchers

could explore the extent to which these other methods are used to develop ethics-related competencies. It would also be advantageous to explore the effectiveness of different training methods, as Naidoo (2020) called attention to the inconclusive research pertaining to the effectiveness of courses on ethics. One additional area for future research is to address whether training and mentoring on ethics-related issues in graduate school is related to later outcomes for graduates of I-O programs. Finally, data were collected from I-O program directors, so future studies that capture student and alumni perspectives (e.g., perceptions of ethics training, the extent to which students and alumni feel prepared and confident in addressing ethical issues) is an important next step.

Notes

¹ Information included in this manuscript has not been published or under consideration for publication elsewhere, though preliminary results were shared with I-O program directors via email in June of 2020 to thank them for their participation and because we believed it was important for this information to be available before we were able to publish the results. Rebecca Brossoit and Jacqueline Wong would like to thank **Tori Crain** and **Gwen Fisher** for providing guidance and insight throughout this project and for encouraging us to challenge and improve our education. This research was supported by the Mountains and Plains Education and Research Center, T42OH009229, funded by the Centers for Disease Control and Prevention National Institute for Occupational Safety and Health. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

² The first author is happy to share the full survey with anyone who is interested.

³ Some participants selected more than one option for the type of graduate program. In all analyses, the denominator included all participants that selected a given response.

⁴ If the total percentage is greater than 100%, this reflects questions with a “select all that apply” response option and/or cases where the rounding of decimals equated to a value greater than 100. If the total percentage is less than 100%, this reflects questions that some participants chose not to answer.

⁵ PhD programs include PhD only and combined master’s/PhD programs.

⁶ Response options included unprepared, somewhat unprepared, somewhat prepared, and sufficiently prepared. Results reflect those who indicated sufficiently prepared. N/A responses were recoded as missing.

⁷ Response options included strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. Results reflect those who indicated either agree or strongly agree.

References

- American Psychological Association. (2017, March). *Ethical principles of psychologists and code of conduct*. Retrieved June 11, 2020, from <https://www.apa.org/ethics/code/>
- American Psychological Association. (2018, September). *Ethics code task force*. Retrieved June 11, 2020, from <https://www.apa.org/ethics/task-force>
- Knapp, D., & Lefkowitz, J. (2018). Introducing SIOP’S committee for the advancement of professional ethics (CAPE). *The Industrial-Organizational Psychologist*, 55(4). Retrieved June 11, 2020 from <https://www.siop.org/Research-Publications/TIP/TIP-Back-Issues/2018/April/ArtMID/20647/ArticleID/1390/Introducing-SIOP%e2%80%99s-Committee-for-the-Advancement-of-Professional-Ethics-CAPE>
- Lefkowitz, J. (2008). To prosper, organizational psychology should... expand the values of organizational psychology to match the quality of its ethics. *Journal of Organizational Behavior*, 29(4), 439–453. <https://doi.org/10.1002/job.527>
- Lefkowitz, J. (2012). Ethics in industrial–organizational psychology. In S. J. Knapp, M. C. Gottlieb, M. M. Handelsman, & L. D. VandeCreek (Eds.), *APA handbooks in psychology®. APA handbook of ethics in psychology, Vol. 2. Practice, teaching, and research* (p. 149–167). American Psychological Association.

- Lefkowitz, J. (2013). Values and ethics of a changing I-O psychology: A call to (further) action. In J. Olson-Buchanan, L. K. Bryan, & L. F. Thompson (Eds.), *SIOP organizational frontiers series. Using industrial-organizational psychology for the greater good: Helping those who help others* (p. 13–42). Routledge/Taylor & Francis Group.
- Lefkowitz, J. (2017). *Ethics and values in industrial-organizational psychology*. Taylor & Francis.
- Naidoo, L. J., (2020). Max. classroom capacity: How should we teach ethics in I-O psychology? *The Industrial-Organizational Psychologist*, 54(4). Retrieved June 11, 2020, from <https://www.siop.org/Research-Publications/Items-of-Interest/ArticleID/3428/ArtMID/19366>
- Payne, S. C., Morgan, W. B., & Allen, J. A. (2015). Revising SIOP's guidelines for education and training graduate program director survey results. *The Industrial-Organizational Psychologist*, 53(2), 158–161.
- Smith, D. (2003, January). *The first code*. American Psychological Association.
<https://www.apa.org/monitor/jan03/firstcode>
- Society for Industrial and Organizational Psychology, Inc. (2017). *Guidelines for education and training in industrial-organizational psychology*. Author.

**Opening Up: Small Wins in Open Science:
Things You Can Do Today to Improve Research in I-O Psychology**

Christopher M. Castille, Nicholls State University

Frederick L. Oswald, Rice University

George Banks, University of North Carolina, Charlotte

Larry Williams, Texas Tech University

The recent open science movement is a multifaceted idea and undertaking, with grand long-term ambitions. Although many academic, editorial, and disciplinary forces involved in the open science movement have called for changes toward improving replicability and reproducibility, those calls can often seem too abstract to be useful, too formidable to be practiced, too peripheral to be worth doing, or otherwise challenging for researchers to understand how to engage in open science. Such calls are often made within a “crisis narrative” that is intended to bring serious attention to the need for transparency and openness in science. Unfortunately, the crisis narrative may very well interfere with our collective ability to carry out several practical day-to-day open science activities that are relatively easy for researchers to do and contribute to a more credible body of knowledge. Fortunately, we can switch the crisis narrative to one that brings focus on the specific opportunities and challenges we face as scientists (Fanelli, 2018). Weick (1984) aptly recognized that many organizational challenges can be reframed as “mere problems” that can be addressed by practical means, leading “small wins” that accumulate toward the common good.

We view many aspects of open science as “mere problems” to address in this practical way, one of them being transparency in published research. To be clear, engaging in open science behaviors that improve transparency does not always mean that sharing research materials and data is always appropriate. Instead, it means more broadly that researchers should communicate transparently about the key aspects of their research process (including why materials/data were or were not shared) so that their readers can then better understand and interpret the results of that research. So long as we can agree on the general principle that improving the transparency and openness of our research practices is beneficial (e.g., building a stronger and more credible community of research and practice), then we all can agree on our commitment to open science. This doesn’t have to be hard—we can work together on “small wins.”

We submit that authors can employ several tactics to get started with a small-wins strategy of opening up science. Here are a few: (a) making the exact scale items for a study available online in a repository, (b) pre-registering one of a set of upcoming studies, (c) making a dataset open and accessible (e.g., through a publication outlet/on OSF/on social media), (d) making their science available sooner by posting an early draft to a preprint server, and (e) posting the training guide and content for activities such as an interview, focus group, or experimental intervention in an online appendix or repository. Picking even just one of these tactics will help you get started with open science. We would love to hear about more open science tactics useful to you! Email them to Chris at christopher.castille@nicholls.edu, and he will share them in a future issue.

We see value in open science habits not just for authors but also for journals. Habits can accrue to journals that encourage open science behaviors in their policies, and these habits can also accrue to researchers as reflected across their work, within their lab, and in working with their colleagues. Such habits signal a strong commitment by journals to making our science more robust (see Grand, Rogelberg, Allen, et al., 2018), perhaps attracting additional journals and researchers in a virtuous cycle that begets a stronger science of I-O

psychology, with more credibility to follow. Some research already reports the promising effects of open science practices. For instance, datasets are often put to greater use in the scientific community when they are shared by scholars in their work, and that work tends to be more highly cited (Christensen et al., 2019; Piwowar et al., 2007; Piwowar & Vision, 2013). Likewise, early access to research via preprints allows contributing authors to receive early feedback prior to publication, and perhaps this is why these articles are shown to gain more article citations as well as greater attention through social media (Conroy, 2019). To be clear, citation chasing is *not* the goal. Citation counts are a highly imperfect indicator of professional reputation. Even retracted articles could go on to be cited (Teixeira da Silva & Bornemann-Cimenti, 2017).¹ Rather, we believe that the open science tactics that we share will draw attention to more credible signals in science, which is a goal that is widely shared across the sciences. Engaging in the *process* of open science is a “win win” for improving science as well as for increasing one’s professional reputation and scholarly impact.

With this entry of “Opening Up,” we wish to offer some guidance for pursuing small wins while highlighting a few pitfalls to avoid. Our intended audience is for those I-O researchers in academic as well as in practice settings who wish to start practicing open science in practical and concrete ways. Understandably, we are all newcomers to open science, and thus our tentative interest may come with some meaningful reservations, such as the idea that preregistration might constrain creativity or subject one’s research to excessive scrutiny (for a discussion see Toth et al., 2020). We should discuss those concerns, not only because open science means an open conversation *about* our science but also because it inspires healthy discussions about alternative options or finding middle ground. For example, sometimes organizational researchers cannot share raw data (e.g., the content of items within a scale) due to the constraints of the sponsoring organization; yet, that organization might be fine with sharing analytic code, descriptive statistics, and correlations (which can allow one to recreate variance–covariance matrices). Even small open science increments in this direction can yield important gains. Roughly speaking, imagine if we found a 20% increase in behaviors that improve transparency and openness in I-O psychology research (e.g., preregistration, materials/data sharing); what impact might that have for the broader credibility, replicability, and reproducibility of our field (and psychology more broadly)? How might science self-correct and improve upon itself?

We should also state that we are not meaning to “sell” open science without evaluating its effects. Like any intervention, open science research practices and journal policies must be evaluated and refined to understand what adds value, what has a neutral or unnecessary effect, and what has negative consequences or unwanted trade offs (e.g., data sharing vs. potential participant re-identification; Meyer, 2018). Indeed, there is now a whole field of study—meta-science (<https://en.wikipedia.org/wiki/Metascience>)—that develops new open science research practices and investigates the effects of practices on the scientific knowledge base. Thus, various small wins in open science will be adjudicated in time as more data on their impact become available.

Small Wins for Opening Up

In a previous entry of “Opening Up” (Castille, Oswald, et al., 2020), we shared the open science rainbow (Kramer & Bosman, 2018), which is a single PowerPoint slide that highlights a variety of practices any scholar can enact to open up various parts of their research pipeline (<https://zenodo.org/record/1147025#.X8EymGRKj5c>). Notably, only a few practices are highlighted; many more have emerged since then and continue to emerge on almost a weekly basis. For instance, tools such as Octopus (<https://science-octopus.org/-octopus.org/> and ResearchBox (www.researchbox.org) have emerged since then, which are platforms that adopt a system-wide approach to open science, allowing all aspects of the research process—from idea inception to dissemination—to become part of the scholarly record. Such tools can also allow outsiders to make suggestions for improvement at any stage of the process (see

Lakens, 2020; Pain, 2018). Tools like these are fascinating and powerful for helping scholars inject more openness and transparency into their work than has been previously possible. In fact, they are potentially paradigm shifting, as they get used by the research community in larger numbers and as these types of tools improve.

To encourage the broader adoption of *specific* open science practices by authors, journals, granting agencies, and other stakeholders, we think it is most productive to focus on those areas where there is widespread agreement that openness and transparency are helpful. For example, with rare exceptions, it is hard to deny that researchers should clearly explain the design and implementation of their research. Reporting methods and results transparently ensures that analyses are understood and subject to scrutiny, and thus they are viewed as more credible for their insights (Grand, Rogelberg, Allen, et al., 2018). This idea introduces our first recommended small win: *Incorporate open science principles within relevant professional policies and principles*. This is a small win, where an entity (e.g., a journal, a professional society, or a research lab) essentially declares a greater focus on the research process rather than solely on research outcomes (see Grand, Rogelberg, Banks, et al., 2018). For example, encouraging simple tasks that improve reproducibility and replicability demonstrates that a given entity not only stands behind the science being offered but is up to the challenges and scientific processes tied to verifying and extending its results. We like to know that a nice new car works before we buy it or, if any mechanical problems arise, that we can have the car examined and repaired. This seems no different, in principle.

Yet of course, following policies and principles might require some deviations in practice. For example, the possibility that employees could be reidentified in the study data usually needs to be avoided (see Meyer, 2018; Pratt et al., 2020). To avoid this possibility, one could adopt Banks et al.'s (2018) advice and explicitly state that either (a) deidentified data and analytic code will be available upon request for your projects or (b) the relevant summary statistics for reproducing analyses will be made available (e.g., descriptive statistics and variance–covariance matrices, see also Bergh et al., 2017). You may even go as far as pointing out that when confidentiality is particularly problematic to maintain (e.g., big datasets with lots of demographic information) that you will make synthetic datasets available to allow key claims to be probed in ways that uphold confidentiality agreements and participant privacy (for a discussion of synthetic datasets, privacy, and the law, see Bellovin et al., 2019). The spirit of this part of the commitment is ensuring that, if individual-level data need to be kept confidential, minimal analytic reproducibility can at least be assured.

To help craft open science statements, several resources are now available. In the I-O psychology research context, we strongly recommend reading Grand and colleagues' (2018) work on robust science, which provides a series of ethical goals for the various roles we all play as authors, reviewers, practitioners, and educators. Some of these ethical goals are common across these roles; some are complementary, yet others are sometimes conflicting, and it is important to appreciate all perspectives on any given open science issue. For instance, such ethical goals, conflicts, and perspectives can become a part of the training we deliver to our students as educators. Fortunately, the *Framework for Open and Reproducible Research Training* (FORRT; <https://forrt.org>) offers (among many things) an extensive list of curated resources for teaching open science. Drawing on these resources and exposing students early may help students see psychology more like a natural science (and also be more critical of published claims; see Chopik et al., 2018).

Overall though, we hope this highlights why open science statements should be made: for example, to ensure that faculty and graduate students are trained in open science and to ensure that research reaches a higher level of credibility and robustness. Open science statements should not sit gleaming in a trophy case. They actually should be brought to life through practical use by the entities producing them. Just like public commitment might lead to stronger adherence to certain goals (Hollenbeck et al., 1989), affirming open science statements in some public manner (e.g., professional outlet, blog post,

research statement) on a continuous basis can be helpful and culture building, where the stated commitment to open science is heard and shared by relevant audiences.

Several leading journals are now, in fact, joining together and signaling their support for a more robust and open science. Just recently, on November 10, 2020, the APA became a signatory to the Transparency and Openness Promotion (TOP) Guidelines (Center for Open Science, 2020). APA journals, such as *Journal of Applied Psychology*, will be developing and implementing a minimum set of standards for ensuring that data and research materials are disclosed. Indeed, editors of APA journals are encouraged to pursue higher standards as they see fit for their journal. So if you are an editor or play a role on an editorial board, consider both the TOP Guidelines (see Nosek et al., 2015) and the Editor Ethics 2.0 Code (<https://editorethics.uncc.edu/editor-ethics-2-0-code/>). These resources should prove helpful for crafting commitment statements. Management journals are also making changes. Recently, Laszlo Tihanyi (editor of the *Academy of Management*) called for scholars to shift their attention from interesting research to important research (see Tihanyi, 2020). Several structural changes have also been made at the *Journal of Management* to promote open science (Bergh & Oswald, 2020).

Next comes a pivotal part: following through. The problem here is ensuring that the next bit of science we share or foster is robust. Consider Banks and colleagues (2018) advice, which we discussed earlier: Preregister at least one of your next three studies. Many find that, like exercise, getting started can be the hardest part. After getting started, authors often find that preregistration can increase the amount of planning done before the study is conducted, thus increasing the quality of the work (see Toth et al., 2020). Again, preregistration only means stating what is planned to be carried out, much like a dissertation proposal. Deviations from a preregistration can still occur for many legitimate reasons, such as when situations or data and samples change, or even when new important aspects of a study need to be considered (see Castille, 2020; Szollosi et al., 2020). The point is simply to file a preregistration as a starting point, to commit to plans and increase the quality and statistical power of the research to be conducted (Toth, 2020), and that any changes from those plans simply will be declared. Regardless of the specific preregistration form that you use, you will be encouraged to ensure adequate statistical power for any proposed studies. To help conduct a power analysis effectively, you could draw on relevant benchmarks in the literature for the typical size of the effect in question (see Bosco et al., 2015). Testing mediation and moderation? Know that these are typically underpowered, but benchmark sample sizes do exist (see Götz et al., 2020; Murphy & Russell, 2017; O'Boyle et al., 2019). Taking the preregistration tactic a little further, if you intend on using code to analyze your data, then write your code before the data are gathered, being attentive to such details as clearly labeling variables and defining how data will be scrubbed. You can mock up a dataset to better ensure that your code can be run on your collected data. You can also mock up your tables. All of this does not really add much extra time to your work; it simply moves that work toward the beginning of the endeavor. This can all be viewed as part of your research, data management, and analysis plan—a plan that can be very valuable for improving the research and addressing issues that might derail a project later. Dissertation advisors often demand this sort of front-end work in a proposal meeting. We could ask why this is done, see if the answers apply to research endeavors following the dissertation, and then engage in open science behaviors accordingly.

To facilitate study preregistration, there are many useful resources available. Earlier, we mentioned ResearchBox and Octopus, but others such as those provided by the Center for Open Science (<https://cos.io/prereg/>) and AsPredicted (<https://aspredicted.org>) are also helpful for preregistering a study. Tools for forming a data management plan can be found at https://dmptool.org/get_started. Other guidance we wish to highlight for preregistering research in our field can be found in the recommendations for study preregistration submitted by Toth et al. (2020; e.g., preregistering a decision tree, analysis code). The [APA's](#)

[preregistration template](#) should also be helpful. We also should note that this template was discussed in [this online video](#) on preregistration standards for psychology. Some might be legitimately concerned about preregistration practices allowing a researcher to be identified or having their idea scooped. Know that there are ways to preregister privately (for the same reason of planning one's research, and there is also time-stamp verification), and there are also ways to share work anonymously with reviewers or to have research embargoed for a period of time (<https://osf.io/4znzp/wiki/home/>). In other words, I-O psychologists can learn how many concerns about open science that have been constructively addressed by those outside of our field.

If these tactics regarding preregistering your work seem easy to implement but you hold a key reservation—that preregistration will not guarantee that a paper will be published—then consider adopting the registered-report format for publishing some of your work (Grand, Rogelberg, Banks, et al., 2018). Registered reports essentially involve submitting an extensive preregistration (introduction, hypotheses, research design, measures, analyses, etc.) for peer review. Journals in our field are increasingly offering this alternative publishing format, such as *The Leadership Quarterly*, *Journal of Business and Psychology*, and the *Journal of Personnel Psychology*. This deals directly with the two key reasons studies are rejected: (a) weak contribution and (b) lack of rigor.

Preregistration also may be one way to facilitate discussions about authorship early, allowing for more discussions about authorship to occur later on as contributions evolve. Commonly at issue is the authorship order. Fortunately, the APA has formed an authorship determination scorecard (<https://www.apa.org/science/leadership/students/authorship-determination-scorecard.pdf>) that can be useful as a starting point for clarifying responsibilities, determining authorship order, and, if necessary, changing this order, particularly as new contributions occur. We should also point out that there is value in the CRediT (contributor roles) taxonomy, which is a method for clearly identifying the contributions each author has made towards a project (<https://tinyurl.com/y67aeks3>). Note how these authorship discussions center on being open and transparent about authorship contributions. As part of these conversations, you may even see value in gaining consensus about where openness and transparency are or are not reasonable. To that end, we encourage scholars to look over the Transparency Checklist (<http://www.shinyapps.org/apps/TransparencyChecklist/>; Aczel et al., 2020). These activities show a commitment to open science.

Letting 1,000 Flowers Bloom...

With this entry of “Opening Up,” we have highlighted several tactics that can help you to generate the small wins needed to make our collective scientific enterprise even more credible. The hope is that by instituting a small-wins strategy, each of us can pave the way toward a more exclusive use of open science principles throughout the research pipeline.

Moving forward, we'd like our future “Opening Up” entry to focus on the bright spots in our field where open science practices are being utilized routinely, allowing credible insights to be transmitted broadly. If you have a story or know of such a story, please feel free to share it with us. Also, we'd like to share other initiatives on which we're working.

Chris Castille is working on a proposal that provides an alternative submission pathway for SIOP posters termed *preregistration posters* (see Brouwers et al., 2020). These posters allow the proposed theory and methods put forward by a scholar to be critiqued by peers and, we hope, to gain the attention of journals wishing to publish registered reports or results-blind reviews (e.g., *Journal of Business and Psychology*, *International Journal of Selection and Assessment*, *Journal of Occupational and Organizational Psychology*,

Leadership Quarterly, Journal of Personnel Psychology). There is some preliminary evidence that preregistered posters help early career professionals receive constructive feedback, promote open science, and support early career research (BNA, 2019). We wish to support these kinds of efforts in our field. Get in touch with Chris (christopher.castille@nicholls.edu) if you'd like to contribute.

Additionally, Larry Williams, director of the Consortium for the Advancement of Research Methods (CARMA), would like to provide more resources for those interested in learning more about open science. Topics include (consisting of panelists and discussants)

- The basics of preregistration and registered reports
- Steps to take to make quantitative work reproducible (e.g., tips for annotating code)
- Panels (editors, reviewers, authors) for giving out advice for adopting open science practices (e.g., pitfalls to avoid)
- Lessons from the editors/authors/reviewers/funding agencies who've adopted open science practices
- Funding agencies and journals that are encouraging scholars to adopt open science practices (e.g., NIH)
- Can you still practice open science using proprietary data? Yes—here's how.
 - If you have any other suggestions for lectures, workshops, tutorials, or panels, then please feel free to reach out to him directly (larry.williams@ttu.edu).

Note

¹ Tools like Zotero (<https://www.zotero.org/blog/retracted-item-notifications/>) are available to check your cited works and ensure that any retracted articles are no longer cited. There is also a Zotero plugin to see whether an article's findings have been supported or disputed: <https://medium.com/scite/introducing-the-scite-plugin-in-for-zotero-61189d66120c>

References

- Aczel, B., Szaszi, B., Sarafoglou, A., Kekecs, Z., Kucharský, S., Benjamin, D., Chambers, C. D., Fisher, A., Gelman, A., Gernsbacher, M. A., Ioannidis, J. P., Johnson, E., Jonas, K., Kousta, S., Lilienfeld, S. O., Lindsay, D. S., Morey, C. C., Munafò, M., Newell, B. R., et al. (2020). A consensus-based transparency checklist. *Nature Human Behaviour*, 4, 4–6. <https://doi.org/10.1038/s41562-019-0772-6>
- Banks, G. C., Field, J. G., Oswald, F. L., O'Boyle, E. H., Landis, R. S., Rupp, D. E., & Rogelberg, S. G. (2018). Answers to 18 questions about open science practices. *Journal of Business and Psychology*, 34(3), 257–270. <https://doi.org/10.1007/s10869-018-9547-8>
- Bellovin, S. M., Dutta, P. K., & Reitering, N. (2019). Privacy and synthetic datasets. *Stanford Technology Law Review*, 22, 1–52.
- Bergh, D. D., & Oswald, F. L. (2020). Fostering robust, reliable, and replicable research at the *Journal of Management*. *Journal of Management*, 46(7), 1302–1306. <https://doi.org/10.1177/0149206320917729>
- Bergh, D. D., Sharp, B. M., & Li, M. (2017). Tests for identifying “red flags” in empirical findings: Demonstration and recommendations for authors, reviewers, and editors. *Academy of Management Learning & Education*, 16(1), 110–124. <https://doi.org/10.5465/amle.2015.0406>
- Bosco, F. A., Aguinis, H., Singh, K., Field, J. G., & Pierce, C. A. (2015). Correlational effect size benchmarks. *Journal of Applied Psychology*, 100(2), 431–449. <https://doi.org/10.1037/a0038047>
- Brouwers, K., Cooke, A., Chambers, C. D., Henson, R., & Tibon, R. (2020). Evidence for prereg posters as a platform for preregistration. *Nature Human Behaviour*, 4(9), 884–886. <https://doi.org/10.1038/s41562-020-0868-z>
- Castille, C. M. (2020). Opening up: A primer on open science for industrial-organizational psychologists. *The Industrial-Organizational Psychologist*, 57(3). <https://www.siop.org/Research-Publications/Items-of-Interest/ArtMid/19366/ArticleID/3293>

- Castille, C. M., Oswald, F., Marin, S., & Bipp, T. (2020). Opening up: Credibility multipliers: Simple yet effective tactics for practicing open science. *The Industrial-Organizational Psychologist*, 58(1).
<https://www.siop.org/Research-Publications/Items-of-Interest/ArtMID/19366/ArticleID/4596>
- Center for Open Science. (2020, November 10). APA joins as new signatory to TOP Guidelines.
<https://www.cos.io/about/news/apa-joins-as-new-signatory-to-top-guidelines>
- Chopik, W. J., Bremner, R. H., Defever, A. M., & Keller, V. N. (2018). How (and whether) to teach undergraduates about the replication crisis in psychological science. *Teaching of Psychology*, 45(2), 158–163.
<https://doi.org/10.1177/0098628318762900>
- Christensen, G., Dafoe, A., Miguel, E., Moore, D. A., & Rose, A. K. (2019). A study of the impact of data sharing on article citations using journal policies as a natural experiment. *PLoS ONE*, 14(12), e0225883.
<https://doi.org/10.1371/journal.pone.0225883>
- Conroy, G. (2019, July 9). *Preprints boost article citations and mentions*. Nature Index.
<https://www.natureindex.com/news-blog/preprints-boost-article-citations-and-mentions>
- Fanelli, D. (2018). Opinion: Is science really facing a reproducibility crisis, and do we need it to? *Proceedings of the National Academy of Sciences*, 115(11), 2628–2631. <https://doi.org/10.1073/pnas.1708272114>
- Götz, M., O’Boyle, E. H., Gonzalez-Mulé, E., Banks, G. C., & Bollmann, S. S. (2020). The “Goldilocks Zone”: (Too) many confidence intervals in tests of mediation just exclude zero. *Psychological Bulletin*. DOI: 10.1037/bul0000315
- Grand, J. A., Rogelberg, S. G., Allen, T. D., Landis, R. S., Reynolds, D. H., Scott, J. C., Tonidandel, S., & Truxillo, D. M. (2018). A systems-based approach to fostering robust science in industrial-organizational psychology. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 11(1), 4–42.
<https://doi.org/10.1017/iop.2017.55>
- Grand, J. A., Rogelberg, S. G., Banks, G. C., Landis, R. S., & Tonidandel, S. (2018). From outcome to process focus: Fostering a more robust psychological science through registered reports and results-blind reviewing. *Perspectives on Psychological Science*, 13(4), 448–456. <https://doi.org/10.1177/1745691618767883>
- Hollenbeck, J. R., Williams, C. R., & Klein, H. J. (1989). An empirical examination of the antecedents of commitment to difficult goals. *Journal of Applied Psychology*, 74, 18–23. <https://doi.org/10.1037/0021-9010.74.1.18>
- Kramer, B., & Bosman, J. (2018, January). Rainbow of open science practices. *Zenodo*.
<http://doi.org/10.5281/zenodo.1147025>
- Lakens, D. (2020, October 30). [93] ResearchBox: Open research made easy [Blog post]. *DataColada*. Retrieved from <http://datacolada.org/93>
- Meyer, M. N. (2018). Practical tips for ethical data sharing. *Advances in Methods and Practices in Psychological Science*, 1(1), 131–144. <https://doi.org/10.1177/2515245917747656>
- Murphy, K. R., & Russell, C. J. (2017). Mend it or end it: Redirecting the search for interactions in the organizational sciences. *Organizational Research Methods*, 20(4), 549–573. <https://doi.org/10.1177/1094428115625322>
- Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., Buck, S., Chambers, C. D., Chin, G., Christensen, G., Contestabile, M., Dafoe, A., Eich, E., Freese, J., Glennerster, R., Goroff, D., Green, D. P., Hesse, B., Humphreys, M., ... Yarkoni, T. (2015). Promoting an open research culture. *Science*, 348(6242), 1422–1425.
<https://doi.org/10.1126/science.aab2374>
- O’Boyle, E., Banks, G. C., Carter, K., Walter, S., & Yuan, Z. (2019). A 20-year review of outcome reporting bias in moderated multiple regression. *Journal of Business and Psychology*, 34, 19–37. <https://doi.org/10.1007/s10869-018-9539-8>
- Pain, E. (2018, November 1). Meet Octopus, a new vision for scientific publishing. *Science/AAAS*.
<https://www.sciencemag.org/careers/2018/11/meet-octopus-new-vision-scientific-publishing>
- Piowar, H. A., Day, R. S., & Fridsma, D. B. (2007). Sharing detailed research data is associated with increased citation rate. *PLoS ONE*, 2(3), e308. <https://doi.org/10.1371/journal.pone.0000308>
- Piowar, H. A., & Vision, T. J. (2013). Data reuse and the open data citation advantage. *PeerJ*, 1, e175.
<https://doi.org/10.7717/peerj.175>
- Pratt, M. G., Kaplan, S., & Whittington, R. (2020). Editorial essay: The tumult over transparency: Decoupling transparency from replication in establishing trustworthy qualitative research. *Administrative Science Quarterly*, 65(1), 1–19. <https://doi.org/10.1177/0001839219887663>
- British Neuroscience Association. (2019, August). *Preregistration posters: Early findings about presenting research early*. Retrieved November 6, 2020, from <https://www.bna.org.uk/mediacentre/news/pre-reg-posters/>
- Szollosi, A., Kellen, D., Navarro, D. J., Shiffrin, R., van Rooij, I., Van Zandt, T., & Donkin, C. (2020). Is preregistration worthwhile? *Trends in Cognitive Sciences*, 24(2), 94–95. <https://doi.org/10.1016/j.tics.2019.11.009>

- Teixeira da Silva, J. A., & Bornemann-Cimenti, H. (2017). Why do some retracted papers continue to be cited? *Scientometrics*, 110(1), 365–370. <https://doi.org/10.1007/s11192-016-2178-9>
- Tihanyi, L. (2020). From “that’s interesting” to “that’s important.” *Academy of Management Journal*, 63(2), 329–331. <https://doi.org/10.5465/amj.2020.4002>
- Toth, A. A., Banks, G. C., Mellor, D., O’Boyle, E. H., Dickson, A., Davis, D. J., DeHaven, A., Bochantin, J., & Borns, J. (2020). Study preregistration: An evaluation of a method for transparent reporting. *Journal of Business and Psychology*. <https://doi.org/10.1007/s10869-020-09695-3>
- Weick, K. E. (1984). Small wins: Redefining the scale of social problems. *American Psychologist*, 39(1), 40–49. <https://doi.org/10.1037/0003-066X.39.1.40>

Update From Washington: 2020 Election Fallout

Bill Ruch

NOTE: This analysis is based on current projections for the most statistically likely 2020 election outcome as of December 1, 2020—a new Biden Administration, a Republican-controlled Senate, and a Democratic-controlled House. It may be weeks before legal challenges are resolved regarding the presidential race, and control of the Senate will likely be determined by the winners of the two Georgia special elections in January. However, Lewis-Burke believes it is prudent to plan based on the currently forecasted, most likely outcome and understand the implications for research, education, and academic medicine federal programs. Lewis-Burke will update its analysis as necessary in the next iteration of this column in the event of a different electoral outcome.

After a contested and unpredictable presidential election, Democratic nominee Joe Biden defeated President Trump to become the forty-sixth president of the United States in January 2021. Despite predictions of a congressional "blue wave," the Senate will likely remain in Republican control, and Democrats are likely to maintain control of the House with a diminished majority. This would usher in at least 2 years of divided government. In some cases, divided government would cause gridlock and prevent President-Elect Joe Biden from advancing his more ambitious campaign promises, such as sweeping climate change legislation or creating a public option for healthcare insurance. In other cases, there would be opportunities for compromise on issues including addressing pandemic preparedness, making infrastructure investments, and advancing long-standing research interests.

With a divided Congress, President-Elect Biden is expected to use executive authorities, when feasible, to advance his priorities, such as rejoining the Paris Climate Agreement to tackle global climate change and extending immigration protections to Dreamers, as well as reverse many of the Trump administration's executive orders, such as on immigration, the First Amendment, the federal workforce, and "race and sex stereotyping." President-Elect Biden has also made restoring the federal workforce a top priority to more effectively execute federal programs and strengthen federal oversight and enforcement. President-Elect Biden plans to move quickly to fill critical cabinet and other federal positions. Of particular note, President-Elect Biden has stated that he plans to put science at the forefront of policymaking, especially to address the coronavirus and future pandemics, and in laying the groundwork for a path to net-zero-carbon-emissions economy wide by 2050 to mitigate climate change.

A Biden administration will have an opportunity to present the first budget request to Congress in 10 years without budget caps and legally mandated defense and non-defense funding splits. While campaigning, President-Elect Biden stated that although he has no plans to propose significant cuts to defense spending, boosting nondefense spending—especially for research and development, healthcare, and infrastructure—are top priorities. However, a Republican-controlled Senate would likely push back against major discretionary funding increases and point to growing deficits.

Implications for SIOP Advocacy

The results are very encouraging for SIOP advocacy. A fresh administration will likely bring even more interest in evidence-based policymaking, and SIOP and its federal relations partners at Lewis-Burke are poised to take advantage of this enthusiasm. Among the issues that are expected to have renewed interest are policing reform; rebuilding and restoring the federal workforce; and improving diversity, equity, and inclusion in federal settings and programs. As noted in the articles below, SIOP has already con-

sulted with the Biden transition teams around several of these thrusts and will look to position our members to be on the front line of future conversations.

Additionally, SIOP's emphasis on nonpartisan areas of long-standing political interest has positioned the Society to thrive in a divided Congress. It is expected that there will be strong interest in evidence-based policy making around each of SIOP's core advocacy area topics, including health and well-being, defense and national security, community policing, veterans transition, the technology-enabled workforce, and education and workforce development. SIOP and Lewis-Burke convened working groups of members to provide I-O findings in support of policy development around these thrusts. Most of these working groups have met with congressional audiences and are ready to hit the ground running in the new year. For instance, SIOP has already provided consultation to congressional staff members around a number of major bills that will likely be reintroduced in the new year, including legislation related to priorities at the National Science Foundation (NSF) and the *Workforce Innovation and Opportunity Act* (WIOA).

Although progress on moving legislation could be slow, SIOP is ready to work with congressional staff to inform their decision making, sign on to letters of support for legislation that aligns with our advocacy goals, and further solidify relationships with federal agencies interested in innovative workforce solutions.

SIOP Advocates for Research Funding in Lame Duck Session

Before presidential and congressional changes go into effect, President Trump and the current Congress have a long list of outstanding legislation to finish during the December "lame duck" session of Congress, including a coronavirus aid package, all 12 annual FY 2021 appropriations bills, the annual defense policy bill, and potentially an energy innovation package. Although there is a commitment to complete these legislative items by the end of the year, there are still many unresolved issues, and the two parties remain far apart on funding and policy priorities. Reaching a budget agreement to advance annual appropriations and a more ambitious coronavirus aid package will be one of the Biden administration's first challenges if not resolved during the lame-duck session.

At the time of this writing, the Senate Appropriations Committee had just released all 12 of its annual fiscal year (FY) 2021 appropriations bills. Although the House passed 10 of its 12 spending bills earlier this summer, the Senate has not passed any. With the slowest start in congressional appropriations process in more than 30 years, the Senate finally released the details of all of its bills to help launch negotiations with the House and try to pass an "omnibus" spending package that includes all 12 bills before the current continuing resolution (CR) expires on December 11. This date will likely be extended with another short-term CR.

Like the House, the Senate rejected significant cuts to federal agencies proposed by the Trump administration. Facing the same budget constraints under the last year of legally mandated budget caps, the Senate, like the House, provided only modest increases to federal programs compared to prior years. However, the Senate still grew or maintained stable funding compared to FY 2020 for most federal programs of interest to the communities.

Of note to SIOP, the Senate bill would provide considerable funding for policing-reform measures at the Department of Justice (DOJ), but there is strong disagreement on party lines over how it should be allocated. The National Science Foundation (NSF) would receive \$8.478 billion, which is \$200 million or 2.4% above the FY 2020 level and \$737 million more than the president's budget request. The Senate level

would be \$70 million below what the House version would provide. **In response, SIOP joined other universities and research institutes to [sign onto a letter from the Coalition for National Science Funding \(CNSF\)](#) in support of the House level for NSF in the conference negotiations.** Lewis-Burke and SIOP will continue to monitor the situation and seek opportunities to engage on behalf of these and other crucial research offices as deliberations continue.

SIOP Issues Transition Statement for Biden Campaign

This election cycle marked a first for SIOP advocacy! At the direction of SIOP leadership, teams of SIOP volunteers were convened to work with Lewis-Burke to develop I-O-based recommendations for an incoming presidential administration leading up to the November elections. The teams compiled two white papers to address areas of strong I-O expertise and federal interest: [federal workforce support](#) and [policing reform](#).

Both white papers aimed to communicate I-O psychology research findings to support policy development. The federal workforce white paper includes evidence-backed recommendations on developing effective hiring and recruitment practices, training and development programs, morale and retention initiatives, and other federal activities, contributed by SIOP experts including **Talya Bauer** and **Kurt Kraiger**. The policing white paper features examples of the application of scientific theory and data-driven methods and findings to enhance police recruitment and selection processes, supervision and leadership, training and development, diversity and inclusion, and other areas. The policing white paper was compiled by SIOP's new standing working group on policing, composed of **Ann Marie Ryan, Rick Jacobs, Amy Grubb, and Sergeant Anna Tornello**.

In the lead-up to Election Day, Lewis-Burke engaged with policy advisors to former Vice President Joe Biden and shared the white papers and expert recommendations. By engaging President-Elect Biden's transition team, SIOP stands to influence future policy initiatives around rebuilding the federal workforce and policing reform, both of which are immediate priorities of the incoming administration. Following the election, Lewis-Burke has continued to send the white papers to new contacts as the names of key advisors become known. SIOP will continue to provide expert input to the Biden administration and congressional contacts from both parties as they seek to develop and implement new initiatives related to the workforce and workplace.

Working Groups Finalize Advocacy Statements

This year, SIOP launched a series of new advocacy areas on health and well-being; national security; policing; and education, development, and training. Advocacy areas are signature efforts for SIOP government relations to provide member-driven support for the consideration of evidence-based I-O psychology as policymakers address the various challenges and opportunities related to major cross-cutting areas of political relevance. Since forming, the advocacy area working groups have been hard at work to get their message out to policymakers.

The first step after convening the working groups is to draft an advocacy statement to inform federal stakeholders on I-O psychology and how I-O research can help create evidence-based policies in a given area. The statements, which provide practical examples of how I-O findings can be leveraged to address various issues within these thrusts, will be used as tools for engaging federal audiences who may not be familiar with SIOP or I-O. The exercise also allows the working-group members to understand how to effectively summarize I-O findings for federal audiences. These statements have already been leveraged

in conversations between advocacy area members and congressional committee staff, facilitated by Lewis-Burke, to introduce the groups and offer I-O's expertise on relevant and forthcoming legislation. The new advocacy statements can be found on the Resources page of the SIOP Government Relations website [here](#). Lewis-Burke will continue to provide updates on Advocacy Area activities as the new administration and Congress begin in 2021.

SIOP Support Early Career Researchers

Through various advocacy activities, SIOP has formed a relationship with the House Science, Space, and Technology Committee, whose staff provide advance information to the Society for feedback on upcoming legislation and opportunities to voice our support. In August, staff reached out to Lewis-Burke to see if the Society would support the *Supporting Early-Career Researchers Act*. The bill would establish a new \$250 million fellowship program at NSF to help postdoctoral researchers weather the disruptions in the academic job market caused by the COVID-19 crisis. If passed, the bill would benefit SIOP members whose careers could be impacted by the pandemic. Upon hearing of this opportunity, SIOP leadership quickly approved the Society's formal support for the bill.

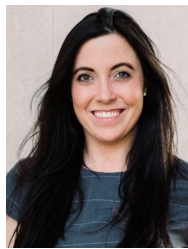
Broad support is needed to elevate issues of importance to the scientific community in future negotiations over COVID-19 relief packages. Lewis-Burke will continue to work closely with SIOP leadership to capitalize on opportunities to advocate with others in the community on behalf of our members' interests. More information on the *Supporting Early-Career Researchers Act* can be found [here](#).

GREAT Committee Advocacy Insights for 2021 and Beyond

In recent weeks, GREAT Committee members have been participating in a SIOP advocacy roadshow with I-O programs like George Mason University. GREAT Committee leaders, invited by **Reeshad Dalal** and **Seth Kaplan**, provided insights into the role of I-O psychology in advocating for workplace science to more than 40 graduate students and alumni. In addition, they shared information about the post-election climate for I-O psychology in the federal landscape. To learn more about how you can leverage this for your next seminar or lunch-and-learn session, please do not hesitate to contact **Alex Alonso** at alexander.alonso@shrm.org.

The Bridge: Connecting Science and Practice

“The Bridge: Connecting Science and Practice” is a *TIP* column that seeks to help facilitate additional learning and knowledge transfer to encourage sound, evidence-based practice. It can provide academics with an opportunity to discuss the potential and/or realized practical implications of their research as well as learn about cutting-edge practice issues or questions that could inform new research programs or studies. For practitioners, it provides opportunities to learn about the latest research findings that could prompt new techniques, solutions, or services that would benefit the external client community. It also provides practitioners with an opportunity to highlight key practice issues, challenges, trends, and so forth that may benefit from additional research. In this issue, we explore academic–practitioner collaboration between a professor and former student in a leadership development project. The article is interview style and includes reactions from two students involved in the work.



**Co-Editors: Kimberly Adams, HumRRO,
Stephanie Zajac, UT MD Anderson Cancer Center,
and Tara Myers, American Nurses Credentialing
Center**

Merging Science and Practice: Creativity and Innovation in a Leadership Development Program

Lindsay Bousman, Roni Reiter-Palmon, Kevin Mitchel, and Ryan Royston



Who Were the Players?

Academic

Dr. Roni Reiter-Palmon is the Varner Professor of Industrial/Organizational (I-O) Psychology at the University of Nebraska at Omaha (UNO). Her research focuses on creativity and innovation in the workplace at the individual and team level and on leading for innovation. She is the editor of the book series Palgrave Studies in Creativity and Innovation in Organizations and is associate editor of both *European Journal of Work and Organizational Psychology* and *Frontiers: Organizational Psychology*.

Student Assistants

Ryan Royston is a personnel research psychologist at U.S. Army Research Institute. He graduated from UNO with his PhD in I-O Psychology. He has worked in consulting, education, and research settings with a focus on leading creative teams, leader identity, and creative mindsets.

Kevin Mitchell is a talent management senior analyst at Nebraska Medicine. Kevin is responsible for the strategic direction of employee development and partners with others to implement leadership development programming. He completed his master's and PhD in I-O Psychology at UNO.

Practitioner

Lindsay Bousman is owner and principal consultant of Intentional Talent Management, LLC., focusing on simple and purposeful talent management solutions. She has over 20 years of experience from external consulting and in-house leadership roles in organizations such as Expedia Group, Starbucks, and Microsoft. Her PhD is from UNO.

What is the project context?

Lindsay: While working internally for a former employer, I worked with a consulting firm to co-create a leadership development program for our directors and senior directors. We were entering our second year of the program, serving 200 leaders per year, in a 9-month cohort-based design. We covered a wide range of leadership skills and competencies and included several assessments. The overarching curriculum and content design were based on a needs assessment via observations and themes from previous talent-review discussions and interviews with our senior leadership team about consistent leadership gaps.

This program was created out of several organizational needs and objectives, including building a broader internal leadership pipeline. We felt we could teach knowledge and capabilities currently missing within the internal applicant pool while retaining internal company- and industry-specific knowledge, which was much more difficult to find externally. We also wanted to centralize our leadership development program, which allowed for efficient scalability in administration, ensured mixed global employee representation, and provided a large platform to consistently teach more emerging leaders the skills needed to advance internally.

How did the project begin?

Lindsay: As part of a cultural shift toward experimentation and incremental improvement (a.k.a. "Test and Learn"), and due to internal expectations to collect data, along with my I-O inclination to rely on data, I had tracked the 360 results from the first year. The data from participants' leaders, together with succession discussions, illustrated areas in which we could improve the program and better align with our competency model. Specifically, we intended to focus less on areas of existing strength and more on closing skill gaps with content not otherwise available.

How did you decide creativity was a necessary element to add?

Lindsay: In the first workshop, we would lead attendees through an exercise to plot their top strengths and developmental areas (as identified by our competency model and 360 assessment) on a series of wall-size posters. We wanted to visualize trends within the cohort. With a group report that showed averages and ranges for each cohort, the trend indicated that creativity and innovation was a necessary, important, but lagging capability. Participant feedback also indicated that they had been rewarded for their own creati-

ty, but as people and team leaders, they did not know how to elicit this from others. Some even saw it as a natural talent (you either had it or didn't) rather than a skill that could be developed.

How did you find an expert, and why include an outside academic view? How did you sell this choice to internal stakeholders?

Lindsay: Coincidentally, I attended UNO for my graduate work, and Dr. Roni Reiter-Palmon was my advisor. I was familiar with her research in creativity and leadership, and we had established trust.

Collaborating with an academic was an intentional choice on my part. Our partner consulting firm had a module on innovation we could add, but I wanted to share the science from a primary source. My participants could be skeptical at times, especially about learning something like creativity, so I wanted to go deep and encourage critical thinking. This was better reinforced with a technical expert in the room instead of a facilitator without deep expertise. On a practical side, we were up and running with most of the delivery and agreed that this approach fit the content and culture. Our employees loved to be involved in test-and-learn experiments, and this method would be welcomed.

Aligning with our test-and-learn culture, using data to determine the topic, and addressing participants' needs for primary-source expertise enabled me to get approval from leadership and stakeholders relatively quickly.

What other considerations were important in creating this collaboration?

Lindsay: A secondary consideration for me in working with Roni was the ability to give graduate students hands-on experience with a large program. I appreciated when I was in school working with I-O professionals in practice and wanted to return the favor.

There is a vast difference between what is learned in school and how a leadership development program is organized and delivered globally in a public, for-profit business. I wanted Ryan and Kevin to experience it firsthand, from the corporate NDAs and contracts to communicating with leaders and facing their questions in the moment, as they learned and worked through problems together.

What was your goal in pursuing this collaboration?

Roni: When Lindsay approached me with the idea, I was very excited. First, it was an opportunity to apply the research that I have been conducting on the cognitive principles that underlie creativity. These principles can be translated into applications that can be trained. The specific cognitive processes on which I chose to focus appear in all creativity models and have been the most researched. These are problem identification and construction, idea generation and brainstorming, and idea evaluation and selection. Although many training programs focus on idea generation, few include the other processes. However, these processes are necessary for effective creativity work. This project provided me with the occasion to determine how these processes can be put into practice. Ultimately, the training was based on research about situational factors that improve the processes and creative outcomes overall.

I also wanted to give students an opportunity to see how the science can translate into practice and to gain experience in developing and deploying training.

What information did you need from the organization to ensure that you were successful?

Roni: Before we started to collaborate, it was important for me to understand the needs of the organization in terms of this new training initiative. What brought this on? Why was this important? What did the organization expect in terms of outcomes? These questions allowed me to determine if our content would benefit the organization.

As the external academic perspective and expert, how did you make the research consumable for a business audience?

Roni: Work on the cognitive processes associated with creativity provides information about what approaches, instructions, and ways of thinking facilitate creative thinking and creative performance. This material naturally lends itself to practical applications like training. One important aspect was our coverage of the problem-identification-and-construction process. This process does not typically get attention in the “lay” literature on creativity. However, the research is clear—people who spend time thinking about the problem from different perspectives before trying to come up with ideas to solve it come up with more creative ideas. This is a simple, effective exercise that is easy to bring back from training to the office.

Still, it was important to be present and to use the information in a way that would make sense to those not steeped in the literature without “dummying it down.” I worked closely with Lindsay to ensure that the materials were at an appropriate level, understandable, relevant, and in line with previous workshops. For example, some exercises and examples were adjusted to reflect the company’s business challenges, such as industry-related problems. We also shared academic research results in more of a story format, making it interactive and asking questions about what employees expected to happen in a study rather than in a factual lecture-based teaching design.

If you were not constrained by resources, what would you have done differently?

Lindsay: We received manager ratings about participants’ progress in self-selected development focus areas. If able, I would have taken all or a subset of the 360 items and reassessed participants after the program. This would allow us to assess progress specifically on the areas we intended to change.

I also would have included participants in the workshop design, inquiring about what they were most curious about in this area, the blockers or misconceptions they had, and their expectations for behavioral change. That can be a vulnerable place to be, but, ultimately, the experience is better when we know participants’ expectations.

Roni: Not so much doing it differently, but I would further explore data to show the effectiveness of the program. We were able to gather a self-evaluation of learning from a small number of participants and measures of creative self-beliefs before and after training. Even with the small number of responses, we were able to show learning and change, which was encouraging. Having a more robust sample and additional evidence would have been great.

From my perspective, seeing how I could translate the research into practice was invaluable. In addition, the participants of the workshop provided further insight into the topic of creativity as it applied to their unique situations, allowing me to learn from their experiences and develop additional research questions.

As students at the time, what were your greatest learnings and surprises?

Ryan: Assisting with this program provided a great opportunity to see research applied directly in an organization. One of the most valuable lessons I learned was understanding how to communicate scientific research to a nonscientific audience in an engaging and practical manner. Something that pleasantly

surprised me was seeing participant reactions to the training. Initially, I could see how some might see this as “just another training” and be skeptical about whether they could increase their creativity. However, as participants gained a greater understanding of the nature of creativity and how they can demonstrate creativity in their jobs, their interest and engagement grew.

Kevin: The greatest learning was the challenge of designing a 2-day course around creativity skills. Starting from such a broad and research-laden area, it was a wonderful opportunity for me to translate the theory and techniques into practice. Further, we had never built a multiday facilitated session. Using the level of detail and consideration needed to ensure participant engagement helped me develop skills that I use in my current role. A surprising aspect was the willingness for leaders to engage with the academic research. We didn’t include many explicit research topics, but the leaders readily engaged and asked for us to bring in the research. Their willingness to navigate that space and the ambiguity that accompanies it added to the impact.

What is next?

Lindsay: This program continued to evolve over time and was revised further the following year to reflect an intentional cultural shift in support of a new business model. In that approach, elements of creativity-and-innovation research were integrated into the exercises to solve new business problems and to focus on the most critical new skills necessary to succeed in the new business strategy. In the future, I would like to see more collaborations combining creativity research and evidence-based practices into methods that are gaining popularity in HR and employee-experience work, such as design thinking or agile development.

Roni: It was very rewarding to see my own research and that of others put into practice. I would like the opportunity to do so again for other organizations. Further, I would like to be able to conduct research that would contribute to our understanding of creativity training and how it helps facilitate creativity in organizations. Most of the creativity-training literature focuses on short-term evaluation; it does not evaluate whether the training successfully influences long-term behavior or whether organizations see benefits from such training.

Beyond Organizations: Contributing to COVID-19 on a Larger Stage

Sylvia J. Hysong, Baylor College of Medicine and Michael E. DeBakey VA Medical Center

The COVID-19 pandemic has transformed the way we live, in a way no act of terrorism, natural disaster, war, economic catastrophe, or other public health crisis has done. As public officials at all levels in the patchwork of governments that comprise our country struggle to make decisions that balance the conflicting demands of public health and economic well-being for their constituents, COVID-19 cases, hospitalizations, and deaths continue to skyrocket; states that had initially begun to bend the curve are seeing resurgences. In short, our country seems to be playing a game of cat and mouse with the coronavirus, and at the time of this writing, the mouse is clearly winning.

In the October issue of *TIP*, [Randall and Solberg \(2020\)](#) called on SIOP to leverage our expertise to respond to COVID-19 in our respective organizations. In some cases, the contributions we can make are evident; we are the go-to experts for work–life integration, training, and e-learning. In other cases, such as assessment and selection, the connection to COVID may not be as immediately obvious, but the topic is clearly still in our wheelhouse. Given the impact we could make in our respective organizations, what kind of impact could we make outside of our traditional organizational roles? For me, a trip home earlier this year inspired me to contemplate the possibility of how we as I-O psychologists could contribute to controlling the COVID-19 pandemic on a larger stage.

Containing the Spread of COVID-19 in Puerto Rico

Earlier this summer I needed to fly to Puerto Rico during the midst of the COVID-19 pandemic to check on my elderly mother, who lives by herself on the island. The prevalence of COVID-19 numbers in Puerto Rico as of the time of the trip were substantially lower than in Houston, where I currently live—one third as many cases and deaths, to be exact, even after accounting for differences in population size. I found these numbers reassuring, though puzzling, given that Puerto Rico is not nearly as well resourced as Texas, especially in the wake of multiple major natural disasters in Puerto Rico over the last 3 years.

Upon visiting the island, I experienced a glimpse of what they were doing right. Puerto Rico required proof of a negative COVID-19 test sampled within 72 hours of flight time; failure to do so meant getting tested on the island and quarantining for 14 days or the duration of one's trip (whichever was shorter) at one's own expense—a reasonable request of visitors to the island and highlighting the importance of increased, fast-turnaround testing. All entrants were required to provide contact information for symptom-monitoring and contact-tracing purposes and report their symptom status daily via text messages to the Sara Alert system, an automated, open-source, public-health monitoring tool for reporting and tracking of individuals exposed to or infected with an infectious disease. Island-wide curfews were in effect from 10 pm to 5 am, a fact of which you were reminded frequently through the emergency alert text notifications system. Alcohol sales and public consumption thereof were prohibited after 7 pm—at one restaurant, we were asked by the owner to ensure all semblance of alcohol be off the table by the 7 pm cutoff. Upon entry to every business I was greeted by a staff member who took my temperature and spritzed my hands with sanitizer (no, they did not trust the public to do it themselves). Masks were mandatory at all times in public. In malls, physical distancing measures were in place, including the now ubiquitous 6-foot floor markings and signs to direct the flow of traffic in a single direction, like lanes in a two-way road, complete with mall personnel to enforce compliance.

I was very impressed by all the hard work the Puerto Rico health officials had put in to keeping the virus at bay. Conversations with family members, neighbors, and shop owners, however, told a different and un-

expected story: one of frustration. Unlike the frustrations of mainland U.S. residents aired repeatedly in the news—conflicts over the need to wear masks or the inability to gather in groups—Puerto Ricans were frustrated with the large numbers of tourists arriving from the mainland US without tests in hand (80% according to the Puerto Rico National Guard), refusing to wear masks or to follow the island's public health regulations. Local residents as well as public officials believed these tourists were ruining the hard work of the locals and using up the precious few treatment resources intended for the island's residents (Acevedo, 2020). Indeed, I worried about not being able to return home amidst protests at the airport the day before my departure, calling for the island to close the airport to incoming flights (a power the governor does not have; all U.S. airports are under the jurisdiction of the Federal Aviation Administration).

The locals' frustrations were certainly understandable; yet, despite the observed increase in cases, the place of my birth was nevertheless having far greater success at controlling the spread of the coronavirus with far less political friction than the place of my residence. This sparked a question in my mind: given that Puerto Rico is a U.S. territory with a fraction of the financial resources of most states (Puerto Rico has the third lowest state/territory GDP per capita according to the Bureau of Economic Analysis), how had it managed to maintain among the lowest confirmed COVID-19 case counts in the country despite a recent rise in cases attributable primarily to tourists? As a faculty member at a school of medicine, some obvious public health possibilities came to mind, such as the fact that Puerto Rico is an island and thus harder to travel to than the continental US. This would certainly be consistent with the low case counts in Hawaii, for example, which is twice as far away by air from the nearest mainland U.S. airport as Puerto Rico is from its nearest airport (and twice as expensive to travel to). Another public health answer laid in Puerto Rico's swift and stringent public safety measures—like Hawaii and certain states on the mainland such as Colorado, Puerto Rico shut down early and sent its residents a consistent message of masking, quarantining, and sheltering in place. This, however, did not fully explain the observed differences in prevalence given available resources, nor did it explain the frustrations I heard from the locals—for that, I needed my I-O psychology superpowers. Through the lens of I-O, two explanations offered potential answers: a shared mental model of adversity and key cultural differences between Puerto Rico and the rest of the United States.

Overcoming Adversity Together: A Shared Mental Model

In the last 3 years, Puerto Rico has suffered a devastating volley of natural disasters and public health emergencies in rapid succession (hurricanes Irma and Maria, and the wave of earthquakes in early 2020) that have wrought devastation on the entire population. With nearly the entire island losing power after hurricane Maria for weeks to months, no one on the island escaped these disasters unscathed. Therefore, everyone on the island has a shared vision of adversity and suffering, providing a strong common goal for the community: to overcome a common source of adversity and devastation—hence the slogan, “Puerto Rico se levanta” (Puerto Rico lifts itself up) commonly heard throughout the island after hurricane Maria. In contrast, though the mainland US has certainly suffered no shortage of natural disasters and emergencies, no single recent event, not even 9/11, has affected the psyche of the entire country as a whole at once. Thus, there is no recent unifying event or set of events over which Americans can come together to create a shared mental model of unity over adversity.

Individualism and Power Distance in the Face of COVID-19

Before becoming a U.S. territory, Puerto Rico was a Spanish colony for over 400 years, and thus retains many cultural features and traditions from Spain that contrast with U.S. culture. When seen through the lens of Hofstede's cultural dimensions theory (Hofstede, 1984), the contrast becomes far clearer. Puerto Rico and the mainland US differ markedly on two dimensions in particular: *individualism–collectivism* (the extent to

which members of a society are supposed to look after themselves versus belonging to groups and active for the good of the collective) and *power distance* (the extent to which the less powerful members of society accept the idea that power is distributed unequally). The US is the most individualistic country in the world according to Hofstede's dimensions, whereas Puerto Rico (treated as a country instead of a territory from a cultural perspective) is in the second lowest quintile, making it far more collectivist. Conversely, Puerto Rico is far stronger in power distance compared to the US, making it a much more hierarchical, centralized society with greater deference to authority; in contrast, mainland US is a much more decentralized patchwork of governments whose residents are far quicker to question authority. This combination of hierarchy, centralization, and deference to authority makes it far easier to implement a comprehensive public health strategy than what seems to be happening in the tapestry that is the 50 states of the Union.

A Call to Action: I-O Psychologists on the National Stage

As I write this article the US is seeing its worst levels of daily cases since the beginning of the pandemic; and despite a vaccine being close at hand, 49% of the population say they would not get a COVID-19 vaccine once it becomes available (Tyson et al., 2020). The US will have an uphill climb relative to other countries in controlling the COVID-19 pandemic in part due to its relative lack of prior adversity and highly individualistic culture with low power distance. To overcome such challenges, a coordinated, centralized strategy to implement a common vision throughout the country with consistent messaging is critical. These challenges are psychological at their core, and SIOP members are, first and foremost, psychologists: experts in human behavior. How can we leverage our decades of expertise in fundamental areas of human behavior, areas like personality, influence tactics, leadership, and culture? How can we use what we know about behavioral change and organizational change management to overcome these challenges strategically rather than in a reactionary manner?

Those of us working in the government sector (7% of our membership, according to SIOP's latest income and employment report) are ideally positioned for such a challenge. For example, I recently served on a national committee in the Department of Veterans Affairs to design a survey assessing VA employees' attitudes to vaccine acceptance so that the agency could make evidence-based policy decisions about how much vaccine to procure and how best to distribute it to its nearly 400,000 employees nationwide. Similar efforts are also underway to make similar assessments and decisions about the nearly 10 million veterans served by the Veterans Health Administration. I-O psychologists in other industries, such as the tech sector, could make an impact of equal magnitude through other means. I invite the membership to think creatively and act boldly to help the country out of these interesting times.

References

- Acevedo, N. (2020, July 22). Puerto Rico wanted tourists, but with coronavirus spiking, it has changed plans. *NBC News*. Retrieved August 5, 2020, from <https://www.nbcnews.com/news/latino/puerto-rico-wanted-tourists-coronavirus-cases-spiking-they-ve-changed-n1234624>
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (2nd ed.). SAGE Publications.
- Randall, J. G., & Solberg, E. (2020). I-O psychology and the response to COVID-19: A call to action. *The Industrial-Organizational Psychologist*, 58(2). <https://www.siop.org/Research-Publications/Items-of-Interest/ArticleID/4747/ArtMID/19366>
- Tyson, A., Johnson, C., & Funk, C. (2020, September 17). *U.S. public now divided over whether to get COVID-19 vaccine*. Pew Research Center. Retrieved from <https://www.pewresearch.org/science/2020/09/17/u-s-public-now-divided-over-whether-to-get-covid-19-vaccine/>

Supporting Caregivers at the SIOP Conference

Vanessa A. Gaskins, Trane Technologies

Drake Van Egdom, University of Houston

Kristl Davison, Appalachian State University

Vipanchi Mishra, West Chester University of Pennsylvania

Samantha Chau, Google

Rebecca Thompson, George Mason University

Jacquelyn Brady, San José State University

Jenna Filipkowski, Human Capital Institute

Alexandra Zelin, University of Tennessee at Chattanooga

Over the last few years, the Society for Industrial and Organizational Psychology (SIOP) and the Women's Inclusion Network (WIN) Committee within SIOP have made substantial progress toward advancing support for caregivers at the annual SIOP conference. In 2017, the SIOP conference first provided lactation rooms to allow caregivers the ability to breastfeed and pump milk while at the conference.¹ 2018 marked the first year in which WIN began a new SIOP tradition with a family-friendly reception to provide networking and support for SIOP members and their families. Although these caregiving supports are vital to the inclusion of and assisting caregivers at SIOP conferences, more can be done to support a range of caregiving demands, including child, elder, and disability.

The focus of this article is to highlight the importance of providing further caregiving support at the SIOP conference. First, we discuss why conferences are important for professional development and reducing inequities. Second, we discuss the prevalence of caregiving demands, the lack of caregiving support at psychology and management conferences, and input from SIOP members as important reasons why SIOP should support members' caregiving needs. Third, we present a discussion of the challenges associated with providing on-site childcare and introduce the Family Care Grant as an alternative. The Family Care Grant promotes inclusivity, supports working caregivers and persons with disabilities, and is likely to increase conference attendance and participation.

Why Are Conferences Important?

In many professional fields, attendance at professional conferences is important to presenting research to the wider community to facilitate the discovery of, engagement with, and generation of new research. Beyond the learning aspects, professional conferences are valuable for one's career. Formal and informal networking with other professionals can lead to research collaborations, contacts for jobs, connections with funders, and skill-building opportunities (Mata et al., 2010). Furthermore, conferences provide mentoring opportunities that build social connections and facilitate career and personal success, as more senior professionals can provide advice on the publication process, job market, and new institutional roles.

Currently, conferences tend to be male dominated, with women declining to present their research at over half the rate of men (Schroeder et al., 2013), which is in part due to disproportionate childcare responsibilities faced by women (Chelsey & Moen, 2006; Schroeder et al., 2013). The inclusion of women on conference committees may partially address these issues as they are linked to increased female representation on conference presentations, but they do not directly meet the needs of caregivers (Casadevall & Handelsman, 2014). We focus on gender, but there may be additional barriers that women of color may face in being able to attend and present at professional conferences (Tulshyan, 2019). The SIOP 2019 Income & Employment Survey provides an important first step in addressing intersectional issues within the field of I-O psychology by reporting income by race and gender (Antonik et al., 2020). SIOP's policies and practices need to ensure that they promote inclusivity and address the intersectional barriers of women and Black people, Indigenous people, and people of Color. By supporting caregiving demands, conferences can potentially reduce these inequities and promote a more inclusive environment for career development.

Why Should SIOP Support Caregiving Needs?

Caregiving Demands

Conference attendance is particularly important for those early in their careers but also presents a challenge for individuals balancing careers and caregiving (Calisi, 2018). In recent decades, the United States has seen changes in the demographic make-up of the workforce. Half of parents are dual-earning couples, which is a 15% increase from 1970 (Pew Research Center, 2015). Further, 40.4 million of the U.S. population (16%) provide unpaid care to someone older than 65 years of age who requires assistance due to aging-related issues (Bureau of Labor Statistics, 2019). The estimate of people with disabilities in the US is 12.8%, which is a fairly substantial part of the population (Kraus et al., 2018). Given these demographic shifts and prevalences, childcare, eldercare, and disability needs are widespread and challenges for working families. Despite the influx of women entering the workforce, women still complete two thirds of the household and child responsibilities even though they work about the same number of hours as men (Lachance-Grzela & Bouchard, 2010; Yavorsky et al., 2015). Fathers are taking on more of the childcare demands than in the past, and men are taking on eldercare demands as well, but mothers still spend more time on childcare and eldercare (Aumann et al. 2011; Livingston & Parker, 2019). These caregiving and household responsibilities make caregiving a significant hurdle for women to achieve their career goals.

Academia and research-related fields pose their own set of unique challenges for those with caregiving responsibilities. The most pivotal moments in an academic career, such as graduate school, post-docs, and junior faculty roles, coincide with typical child-rearing age. For instance, 90% of women have their first child prior to age 35 and about 80% before age 30 (Mathews, & Hamilton, 2016), with the age at first birth increasing, indicating that mothers are putting off child rearing until later in life (Martin et al., 2019). When women choose not to attend professional conferences for child-rearing reasons, their careers may pay a "baby penalty" in terms of promotions and unfair lack of opportunities (Mason, 2013). In addition, graduate students often face precarious financial situations that further inhibit their ability to invest in their career, including attending conferences.

For parents, childcare options during conferences may be limited. One parent may choose to leave children at home with another parent or to leave children with another relative (e.g., grandparent). These options may not be viable for a host of personal family reasons. For example, if both parents wish to attend the conference or if relatives are not physically close to the parents, leaving a child at home would not work as readily. Moreover, leaving children with aging relatives may not be possible, as increasing numbers of Americans find themselves in the "sandwich generation," caring for both younger children and elderly parents (Parker & Patten, 2013). Some parents may find that the best choice is to

take the children with them to the conference, especially those with infants who are nursing. Individuals with eldercare and disability needs will also need flexibility to effectively and comfortably meet the needs of their unique situations to attend the annual SIOP conference.

In addition to helping meet the needs of I-O psychologists with caregiving responsibilities and disabilities, supporting them can advance our field. Currently, SIOP provides lactation rooms, and WIN hosts a family-friendly reception. Although these are important steps to supporting parents, they stop short of providing enough support and inclusion to help reduce the financial burden on caregivers and those with eldercare and disability demands. SIOP can display strong leadership and serve as a role model for other professional conferences in this area as both psychology and management conferences tend to provide extremely minimal, if any, caregiving support.

Caregiving Supports at Psychology and Management Conferences

To get a better sense of the caregiving support offered at related conferences, Mishra and colleagues (2020) examined the websites of major professional conferences in the field of psychology and management held in 2019, specifically associations with 500+ members and a regional or national conference. Each conference website was coded for the availability of child supports-related information (see Table 1). A review of 43 major conferences websites held in 2019 indicated that eight (18.60%) of the conferences listed availability of a lactation room, three (6.98%) offered on-site childcare, and one (2.33%) offered a childcare grant. However, the majority of conference websites made no mention of childcare or caregiving at all.

Table 1

Childcare Supports Offered by Psychology and Management Conferences in 2019

Childcare supports	% of conferences (out of 43)
Lactation room	18.6%
Parent lounge or play area for children	4.7%
Family networking opportunities	4.7%
Childcare on site	7.0%
Childcare grants	2.3%

Mishra et al. (2020) also looked at three factors that may influence child supports offered by conferences, including percentage of women in the association, management versus psychology conference, and whether the conference was held during the school year (see Table 2). Findings indicated that psychology conferences were more likely to mention providing childcare-related supports, conferences were more likely to mention childcare-related supports when they were held during the school year, and more supports were offered if the primary association had more than 50% female members. Within the psychology and management fields, much work still needs to be done to better meet caregiving and disability needs. In particular, as a field that is uniquely attuned to the intersection of psychology and work, we believe that SIOP should take a lead on addressing this work–nonwork issue.

Table 2

Caregiver Supports on Conference Websites by Type of Conference, Timing of Conference, and Gender Proportion of Membership

	<u>Type of conference</u>		<u>Timing of conference</u>		<u>Gender proportion of membership</u>	
	Management (<i>N</i> = 17)	Psychology (<i>N</i> = 26)	Not during school year (<i>N</i> = 9)	During school year (<i>N</i> = 30)	< 50% female (<i>N</i> = 8)	> 50% fe- male (<i>N</i> = 35)
Lactation room	1	7	2	6	4	4
Parent lounge/ play area	0	2	1	1	0	2
Family networking	0	2	1	1	0	2
Childcare on site	0	3	1	2	0	3
Childcare grants	0	1	0	1	1	0

SIOP Members' Input

In the SIOP 2019 Income & Employment Survey of 1,403 members, a substantial portion (39%, $n = 547$) of the respondents reported having children under 18 living in their households, and of these, over two thirds ($n = 377$) reported being the primary caregiver or sharing caregiving responsibilities (Antonik et al., 2020). In addition, 16% ($n = 218$) reported having caregiving responsibilities for adults (Antonik et al., 2020). To better understand the childcare needs of SIOP members, we included a number of questions regarding childcare responsibilities as a potential obstacle to conference attendance in the SIOP 2019 Member Survey. Our questions were submitted several months prior to the expansion of this proposal to include other types of caregiving and therefore only pertain to childcare. Of the 491 SIOP members who responded to our question of whether or not childcare was a consideration in their participation at past conferences, 89 (18.1%) responded yes. Women ($n = 58$) were modestly more likely to agree than men ($n = 27$; $\chi^2 = 6.74$, $p < .01$). With respect to employment status, those who identified childcare as a consideration in their attendance were overwhelmingly faculty of all ranks and advanced practitioners. Childcare concerns weighed most heavily among the junior faculty group of respondents, among whom 42% ($n = 23$) indicated that childcare was a consideration in attendance.

Additional questions about childcare were posed to those 89 respondents who indicated that childcare was a consideration in their attendance. These participants indicated that they would be modestly likely to take advantage of affordable childcare offered by SIOP ($n = 81$; $M = 3.49$, $SD = 1.52$ where 1 = *very unlikely* and 5 = *very likely*). Their overwhelming preference was for coverage that included both day-time and evening events (71%), and for SIOP to facilitate on-site group childcare (87% selected this as their first preference for a childcare benefit). Respondents' preferred second-choice options were most commonly off-site group childcare (55%) or a childcare grant to support individual childcare needs (27%). These results demonstrate that SIOP members still need more caregiving support with on-site childcare and a caregiving grant providing two potential options.

Potential Caregiving Supports

We have outlined a number of reasons that supporting members who require care or provide care to a dependent would be valuable for conference attendees, particularly those who are graduate students or early career professionals, and how this is beneficial to our field and its inclusivity. There are several ways SIOP could support conference attendees with these responsibilities, and our committee considered both on-site childcare and a caregiver grant. Despite the survey respondents' preference for on-site group childcare, there were a number of barriers to this option (e.g., legal liabilities, parental concerns about unknown care providers, need to identify a local care provider annually in each city). Instead, we decided on the Family Care Grant for SIOP 2021 and SIOP 2022 to overcome these barriers and provide expanded support to members needing eldercare or persons with disabilities.

Family Care Grant

A family care grant would expand support options to help attendees meet the financial burdens of caregiving either for themselves or for their dependents. This would allow attendees to make decisions based on their unique needs, such as bringing a caregiver along or funding caregiving for a dependent at home. In summary, this is the most flexible option with the possibility of supporting various types of caregiving needs that may currently preclude members from attending the conference.

The SIOP Family Care Grant will provide \$500 awards for up to 20 members who require caregiving support to facilitate their conference attendance. This option would allow members to use a lump sum of money for care as they see fit. The Family Care Grant will be offered for the SIOP 2021 conference in New Orleans and the SIOP 2022 conference in Seattle. We will evaluate the long-term potential of caregiver support based on the experiences at these conferences.

SIOP Conference Family Care Grant Eligibility

In order to be eligible to receive funds, applicants must (a) be a current SIOP member; (b) be a caregiver, defined as a person providing care to another person who requires care (e.g., children, elders, persons with disabilities) or a person who requires caregiving support at the conference (e.g., members with disabilities); (c) be the only caregiver in the family applying for the grant funds; and (d) report facing some financial difficulty attending the conference due to financial caregiving needs. If there are enough grants to serve each eligible applicant, all applicants will receive a grant. If there are more applicants than grants, our committee will prioritize graduate students and early career professionals (who likely have more limited funds than other members). More information on the Family Care Grant will be available on the SIOP conference awards website: <https://www.siop.org/Foundation/Awards/Conference-Awards>.

Note

¹ Although this article frames some arguments from a binary view of gender, we acknowledge that people identifying as nonbinary will face similar barriers, and we affirm that SIOP caregiving policies and practices should be inclusive of everyone's needs.

References

Antonik, C. W., Davison, H. K., DuVernet, A., Kaszycki, A., & Oppler, S. (2020). *Know your worth: Results from the 2019 SIOP salary survey*. Society for Industrial & Organizational Psychology 2020 Conference.

- Aumann, K., Galinsky, E. & Matos, K. (2011). *The new male mystique*. Families and Work Institute.
<https://www.familiesandwork.org/research/2011/the-new-male-mystique>
- Bureau of Labor Statistics. (November, 2019). *Unpaid eldercare in the United States--2017-2018 summary*. BLS.
<https://www.bls.gov/news.release/elcare.nr0.htm>
- Calisi, R. M. (2018). Opinion: How to tackle the childcare--conference conundrum. *Proceedings of the National Academy of Sciences*, 115(12), 2845–2849.
- Casadevall, A., & Handelsman, J. (2014). The presence of female conveners correlates with a higher proportion of female speakers at scientific symposia. *mBio*, 5, 1–4.
- Chelsey, N., & Moen, P. (2006). When workers care: Dual-earner couples' caregiving strategies, benefit use, and psychological well-being. *American Behavioral Scientist*, 49, 1248–1269.
- Kraus, L., Lauer, E., Coleman, R., and Houtenville, A. (2018). *2017 disability statistics annual report*. University of New Hampshire.
- Lachance-Grzela, M., & Bouchard, G. (2010). Why do women do the lion's share of housework? A decade of research. *Sex Roles*, 63(11–12), 767–780. <https://doi.org/10.1007/s11199-010-9797-z>
- Livingston, G., & Parker, K. (2019). *8 facts about American dads*. Pew Research Center.
<https://www.pewresearch.org/fact-tank/2019/06/12/fathers-day-facts/>
- Martin, J., Hamilton, B., Osterman, M., & Driscoll, A. (2019). *Births: Final data for 2018* (Volume 68, Number 13; National Vital Statistics Reports). Centers for Disease Control and Prevention.
- Mason, M. A. (2013). The baby penalty. *Chronicle of Higher Education*. <https://www.chronicle.com/article/The-Baby-Penalty/140813>
- Mata, H., Latham, T. P., & Ransome, Y. (2010). Benefits of professional organization membership and participation in national conferences: Considerations for students and new professionals. *Health Promotion Practice*, 11(4), 450–453. <https://doi.org/10.1177/1524839910370427>
- Mathews, T. J., & Hamilton, B. E. (2016, January). *Mean age of mothers is on the rise: United States, 2000–2014*. Center for Disease Control and Prevention National Center for Health Statistics.
<https://www.cdc.gov/nchs/data/databriefs/db232.pdf>
- Mishra, V., Davison, H. K., Ferrise, E., & Blose, E. (2020). *Work-family conflict and professional conferences: Do we walk the talk?* Poster accepted for presentation at the 2020 American Psychological Association Conference.
- Parker, K., & Patten, E. (2013). *The sandwich generation*. Pew Research Center: Social and Demographic Trends.
- Pew Research Center (2015). *Raising kids and running a household: How working parents share the load: In close to half of two-parent families, both mom and dad work full time*. http://assets.pewresearch.org/wp-content/uploads/sites/3/2015/11/2015-11-04_working-parents_FINAL.pdf
- Schroeder, J., Dugdale, H. L., Radersma, R., Hinsch, M., Buehler, D. M., Saul, J., Porter, L., Liker, A., De Cauwer, Johnson, P. J., Santure, A. S., Bolund, E., Ross, L., Webb, T. J., Feulner, P. G. D., Winney, I., Szulkin, M., Komdeur, J., Versteegh, M. A., ... Horrocks, N. P. C. (2013). Fewer invited talks by women in evolutionary biology symposia. *Journal of Evolutionary Biology*, 26, 2063–2069.
- Tulshyan, R. (2019, September 24). What it will take to improve diversity at conferences. *Harvard Business Review*.
<https://hbr.org/2019/09/what-it-will-take-to-improve-diversity-at-conferences>
- Yavorsky, J. E., Dush, C. M. K., & Schoppe-Sullivan, S. J. (2015). The production of inequality: The gender division of labor across the transition to parenthood. *Journal of Marriage and the Family*, 77(3), 662–679.
<https://doi.org/10.1111/jomf.12189>

New Alliance for Organizational Psychology (AOP) White Paper:

Women in Power: Contributing Factors That Impact on Women in Organizations and Politics; Psychological Research and Best Practice



Access the White Paper Here:

<https://img1.wsimg.com/blobby/go/0567b461-ac8d-411b-b8fe-abb7b43bd87d/downloads/WIP.pdf?ver=1602299104641>

Aims and Objectives of the White Papers

The aims of the Alliance for Organizational Psychology (AOP) white paper series are to

1. Address globally relevant topics that are of interest to policy and decision-makers
2. Highlight key areas where organizational psychology can make a substantial contribution to practice
3. Feature contributors offering international perspectives and viewpoints

The intended purpose of these white papers is to share information about the value of organizational psychology (OP) and how OP can be used to improve the well-being and performance of people and organizations with non-OP HR and business practitioners and leaders.

Special thank you to the Alliance White Paper Subcommittee members (**Angela Carter**, Hazel McLaughlin, Maree Roche, and **Lynda Zugec**) for their efforts and support in making the white paper series a reality.

Making I-O Visible: Applying Design Thinking to Grassroots Visibility Efforts

Sevelyn J. VanRonk, Gordon B. Schmidt, Amelia C. Do, Shavonne U. Holman, Macy E. Cheeks,
Sayeed Islam, Lisa M. Kath, & William P. Jimenez

Although the industrial and organizational (I-O) psychology community is becoming more visible each year, our capabilities are still misunderstood and underrated. If people do not know what we do or how we can help, they will not utilize our skill sets. As written by Ryan (2003, p. 28) “We need to make some inroads toward educating the general public about who we are because anyone who works can and will be affected by what we do.”

There are many traditional pathways by which people might be informed about I-O psychology, such as textbooks, classroom instruction, SIOP white papers, journal articles, SIOP videos, and SIOP newsletters. These pathways are important but are far from complete in their reach. People would either need to be enrolled in a class (AP Psych, introductory psychology) or already know about SIOP to get access to much of this information. Further, these traditional pathways are often text heavy, may assume a base level of knowledge, and can be intimidating to nonacademic audiences.

Evidence shows that we can improve how we represent ourselves to those outside of our community. In their study, Nolan et al. (2014) found that people ($N = 215$) were less familiar with I-O psychology compared to business administration and HR management. Gasser et al. (2004) urge I-Os to move beyond word of mouth and brochures as the typical way to advertise I-O psychology. One might have expected social media efforts to have made greater visibility strides. However, in their Google search, Twitter, and Instagram analysis of I-O's digital presence, Armstrong et al. (2020) discovered that I-O does not have a consolidated digital name/abbreviation. It is evident that we need to continue utilizing creative methods to connect with the general public.

This article will consider three very different I-O-related outreach efforts (*My Mommy is an Organizational Psychologist*, Blacks in I/O, and I-O psych memes) from the design-thinking approach. The approach can help us consider how to implement and improve future I-O outreach efforts.

Design Thinking

Over the past few decades, design thinking has garnered much attention as a solution-driven process, renowned for its ability to promote innovation across industries. Design thinking has been defined as a multistep process that focuses on strategies that address the issues of a targeted population (Dam & Siang, 2020). Its goal is to understand the target population so that the product and services being developed best suit their needs. The design-thinking framework was first popularized in industrial settings but has more recently been applied to education, medical settings, and organizational development (Foster, 2019). Although there are varying models of design thinking, the most popular is the five-stage model proposed by the Hasso-Plattner Institute of Design at Stanford University (Dam & Siang, 2020). This model has five stages:

1. *Empathize*. Developers should approach the issue with an empathetic understanding. By empathizing with the target population, a developer will gain a deeper perspective of their issue and their needs.
2. *Define*. Developers begin collecting information that was identified during the empathizing stage. Information that has been collected will allow the team to define the specific problems of the target population.

3. *Ideate*. Based on the understanding of the target population from the empathizing stage and through identification of specific problems, developers can now begin coming up with solutions.
4. *Prototype*. Developers can now work to pilot their solutions. This can include creating models or implementing strategic plans. During this stage, feedback on models and plans may be solicited from experts then revised and improved for efficiency.
5. *Test*. Developers begin testing their product or service on the intended population. At this stage, developers may return to any of the previous stages to improve the product or service.

Although design thinking is presented in a sequential format, it should not be thought of as a sequential process. The ability to start at any stage of design thinking to improve a product or service provides many advantages. Its utility allows it to be applied to any situation and allows for a population-focused problem-solving approach (Razzouk & Shute, 2012). We believe the approach it provides is beneficial in understanding existing I-O outreach, with an eye toward improving future outreach.

We now present three current outreach initiatives as case studies. The people in those initiatives discuss their outreach efforts using the design-thinking approach and lessons they have learned. Although the founders of these outreach efforts did not directly use design thinking during the creation of their work, they intuitively leveraged design thinking to some extent. Further, they believe this framework can be useful for other I-Os looking to create their own visibility work.

Case Study #1: *My Mommy is an Organizational Psychologist*

My Mommy is an Organizational Psychologist was written by Sevelyn VanRonk, PhD candidate, and illustrated by Blake Beckmann, MA. Her illustrative book takes concepts in our field such as training, teamwork, leadership, mentorship, selection, and creativity, and depicts them in a digestible and fun way. Although the represented topics may not be a comprehensive list of what an I-O practitioner can do, it is a good snapshot of ways I-Os can help people at work. Since publishing in January of 2020, she has sold over 200 copies of the book, has over 700 followers on Instagram, and is referenced in a *Psychology Today* article by **Ron Riggio**.

Step #1: Empathize

Sevelyn was inspired to write this book after attending an after-school program for first graders on career day. The students were eager to learn about I-O, yet she found it difficult to use age-appropriate examples. She realized that many I-Os likely have a difficult time communicating their work to adults, let alone children. This is step one of design thinking—research your users' needs. Currently, the field lacks simple tools to explain the work of a practitioner. Many I-Os look for non-jargon ways to describe their work to family, friends, and strangers.

Step #2: Define

Step 2 of design thinking is to clearly state the problem. One way to do this is to create a problem statement. For this team, the problem statement was quite simple: "I am an I-O practitioner, and I have a hard time describing what I do."

Step #3: Ideate

Once you have clearly identified the need, you can brainstorm solutions. Sevelyn used to study child development, so the idea of a children's book immediately came to her mind as a solution. What examples would be relatable for children? What topics in I-O could easily (although not extensively) be represented? These were the conversations she had with her illustrator, I-O colleagues, and her friends.

Step #4: Prototype

Where they spent the majority of their time was in Step 4, the prototyping phase. Her illustrator would create simple sketches for her to review (Image 1). At this point Sevelyn started a PowerPoint with the noncolored images and associated text (Image 2).



Image 1. Initial sketch



Image 2. PowerPoint draft

Step #5: Test

After having a prototype, it was time for Step 5: the feedback. Sevelyn brought her prototype to her graduate school lab for feedback on the images, topics, and wording. The hardest page in the entire book was figuring out how to have the organizational psychologist explain her work in one sentence. The main point of design thinking is to create rapid prototypes, get feedback, and make improvement—it is an iterative process (Image 3).

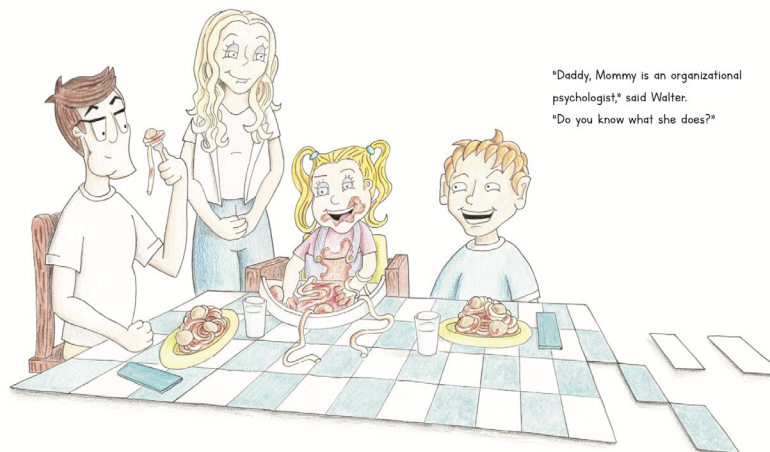


Image 3. Final illustration in book

There are two lessons Sevelyn and her team learned that they would like to share with you: (a) have a realistic timeline, and (b) build a supportive and experienced team. When Sevelyn had initially thought of this idea, she expected it to “be a fun summer project.” In reality, it took over 18 months from start to finish. Realizing that your first draft/prototype is unlikely to be your final version is a key insight into design thinking. In fact, the iterative process is what helps you arrive at a better final product. So be patient, map out a reasonable timeline, and be prepared to create and re-create until it is just right. Finding the right team members is everything! Sevelyn and Blake hired a consultant and a graphic designer to help them through the process. They had no idea what it would take to get their script and illustrations put together in a way that is publishable. From buying ISBNs to securing copyrights to flipping images to make the storyline work better, having people with experience is a worthwhile investment.

Case Study #2: Blacks in I/O Psychology (BIOP)

Shavonne Holman, MPS, and **Macy Cheeks**, MS, are the cofounders of Blacks in I/O Psychology (BIOP). In 2019, they created a professional-networking and learning association that aims to build minority pipelines and increase awareness of I-O psychology at minority-serving educational institutions nationwide. With over 1,000 followers on their Instagram account and 1,500 I-Os on their email listserv, BIOP has catapulted into the position of leading I-O affinity group.

Step #1: Empathize

As the framework suggests, empathizing with the audience was very important to the success of BIOP. In fact, Macy and Shavonne were able to empathize best with their target population, because they *were* their target population. Their first-hand experiences served as the inspiration for BIOP because they understood what their target audience needed. For example, Macy and Shavonne recalled what it

was like to come from a noteworthy undergraduate university but still feel less knowledgeable or less prepared for their I-O graduate studies compared to their White counterparts who came in with more I-O experience/exposure. From shared experiences like these, the BIOP founders were easily able to identify the need for exposure to I-O psychology in minority-serving institutions, which became one of their overarching goals of the organization.

Step #2: Define

After launching a LinkedIn local group, they were able to clearly define the problem of their target audience. There was an appetite for a professional networking space for Black I-O psychologists, practitioners, and students. They found that there was a community experiencing the same hardships that they faced. What started as a local networking group for the DC, Maryland, and Virginia area, where Macy and Shavonne reside, blossomed into a worldwide network of minority I-O psychologists and allies who wanted more tangible experiences from the BIOP community.

Step #3: Ideate

Interest in BIOP grew quickly. Macy and Shavonne needed to strategize how to accommodate innovative ideas that were proposed while also staying true to their vision for the organization. They administered a survey to further understand the needs of their target population and devised solutions based on survey responses to not only serve local Black I-Os but a now growing, worldwide group of Black I-Os and allies.

Step #4: Prototype

Macy and Shavonne started to explore different aspects of the problems identified to uncover meaningful solutions. They had the unique ability to prototype different methods of engagement and offer these experiential events to the community in real time. Solutions started as in-person networking events (Image 4) but quickly grew to educational seminars and virtual events that yielded over 800+ registrants (Image 5). Like many others, Shavonne and Macy were impacted by the pandemic and quickly had to pivot their efforts, brainstorming solutions to offset the lack of face-to-face engagement. They added content to their website such as a student resources page, a job board, and member spotlights.



Image 4. In-person networking event

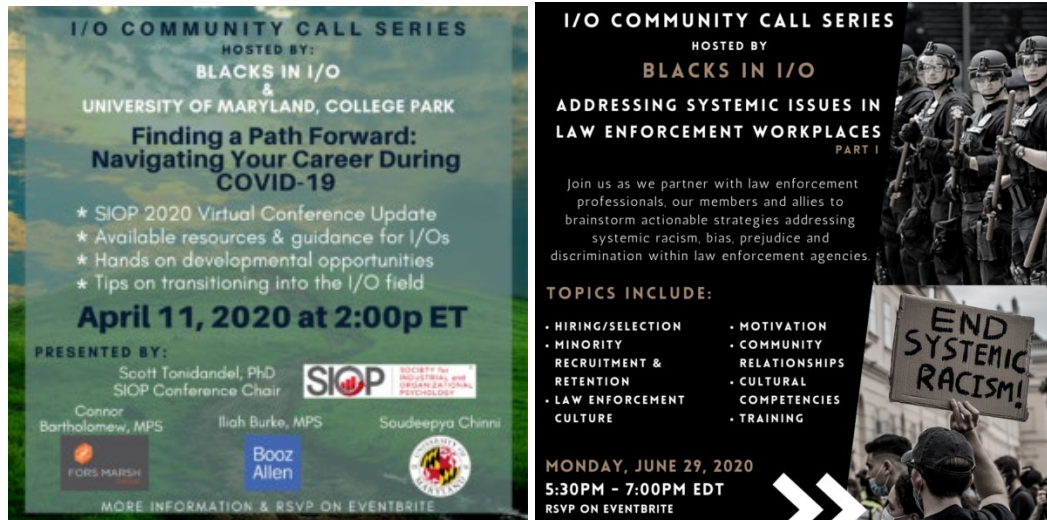


Image 5. Virtual events

During the pandemic, Macy and Shavonne started to receive an influx of requests on ways to get involved with BIOP and partnership requests. To properly handle these requests, they created five committees addressing their most pressing needs and opportunities. As these committees grew to a cohort of 50+ volunteers, there was a need to formally identify the specific community in which they served. Who were BIOP's members? After brainstorming ideas and prototyping solutions, BIOP released their formal membership structure on October 16, 2020. This solution offered BIOP the ability to identify the needs of members and allies. The support and feedback received has been overwhelming.

Step #5: Test

BIOP is inspired to do this work to promote a nationwide understanding of the unique experiences that African Americans face in the workplace and serve as a vehicle to enable conversations and evidence-based solutions. Design thinking is a cyclical process; Shavonne and Macy are still working with their organization to prototype and test. This process of feedback and improvement has helped them grow their company and serve many I-Os. The BIOP movement stands as a representation of a changing attitude in the I-O psychology field and has inspired other community groups to mobilize (e.g., Latinos in I/O).

There are two tips Macy and Shavonne would like to share with you. (a) Ask for the help you require and take the help that is offered early on. For example, BIOP created committees (i.e., social media outreach, business development) to delegate tasks critical to their success. Having help was crucial for Macy and Shavonne when gathering ideas and exploring solutions to problems. (b) Do not lose sight of your original vision. Early on, many BIOP advisors shared their opinions on where the group should focus their efforts. Oftentimes, their ideas were not in line with the authenticity, vision, mission, and goals set out for BIOP. It is important to be open to innovative ideas in the prototyping process, but stay committed and focused on the direction of your organization.

Case Study #3: I-O Psych Memes

Lisa Kath, PhD, started making memes about I-O psychology for outreach purposes and posting them to accounts (@iopsychmemes) on Instagram, Twitter, and Facebook. Since November 2019, these accounts have gathered over 5,000 followers across platforms, reaching high school students, business

professionals, and existing I-O psychologists.

Step #1: Empathize

I-O psychology's branding has been under scrutiny for many decades (Gasser et al., 2004; Lefkowitz, 2010). How many times have we been met with blank stares when we say we are I-O psychologists? How often are practitioners frustrated about organizations' resistance to implementing science-based initiatives (Islam et al., 2018)? This lack of implementation of I-O-psychological science into practice characterizes the scientist–practice gap, with lack of knowledge of the field keeping people from the valuable insights we offer (Kurtessis et al., 2017). By considering our users' needs, I-O psychologists can increase awareness of the field and help bridge the science–practice gap.

Step #2: Define

Using the second step of design thinking, there are two major problems to be addressed: (a) increasing awareness about what we do, and (b) communicating I-O psychology ideas in a clear, concise, and engaging manner. Whether it is a graduate student explaining the field to their family or an I-O practitioner explaining a concept to a client, this communication piece is a real challenge requiring an innovative response.

Step #3: Ideate

One innovative way to present I-O psychology material may be Internet memes.

An Internet meme is a “unit of information . . . , which replicates by passing on via Internet (e-mail, chat forum, social networks, etc.) in the shape of a hyper-link, video, image, or phrase” (Castaño Díaz, 2013, p. 9). Memes have become a common part of Internet communication and express ideas in a fun, accessible way.

Lisa saw her oldest kid making memes about technical theater, and she found them to be interesting, informative, and memorable. This gave her the idea that memes may provide a unique opportunity to present serious I-O ideas through amusing images, often from well-known popular culture productions or personalities. Political campaigns, social movements, and educators have successfully used memes to communicate ideas to their audiences. Although some criticize the use of memes as unprofessional, if we are truly looking to innovate, we may need to meet our users halfway and try to create evidence-based content that is more engaging. Given the popularity of memes, the meme could be a format that makes I-O more comprehensible and accessible.

Step #4: Prototype

In the prototyping phase, Lisa learned to make memes from her kid, and then shared the memes with her graduate students. They encouraged her to start an Instagram account for sharing the memes with the public. A couple of days later, she started accounts on Twitter and Facebook, developing a process for making and posting memes daily (for examples, see Image 6 and 7).



Image 6. Meme example 1



Image 7. Meme example 2

Step #5: Test

So far, there have only been anecdotal accounts of the memes' success in accomplishing the problems identified in Step 2. Based on user reports, the memes on these accounts have been seen (and shared) by I-O and non-I-O practitioners, educators, college students, and even those in high school taking AP Psychology. Jimenez et al. (2020) analyzed some of the patterns of what memes were well shared, but more analysis is needed to ascertain what resonates best. Anecdotes indicate that memes are memorable and accessible to those interested in sharing our science.

Their lessons learned that can be applied to other outreach efforts can be found in the meme below (Image 8).

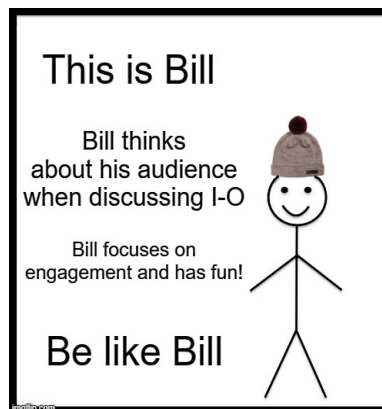


Image 8. Recommendations for outreach efforts

Conclusion

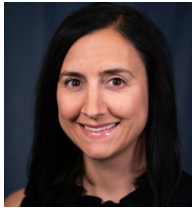
As you can see from the case studies above, each offers a creative way to deal with a unique problem related to outreach and I-O psychology. By thinking of each of these initiatives from the design-thinking approach, we can see potential considerations for future outreach on how to be successful. We hope these examples spark ideas for your own future I-O outreach efforts. I-O psychology has a lot to offer, but we cannot fulfill our potential to those who do not know our field. We need to go out there and present ourselves in ways that are creative and help understanding of what I-O psychology is all about!

References

- Armstrong, B., Schmidt, G. B., Islam, S., Jimenez, W. P., & Knudsen, E. (2020). Searching for I-O psychology: How practitioners, academics, and laypeople engage with the I-O brand online. *The Industrial-Organizational Psychologist*, 57. <https://www.siop.org/Research-Publications/Items-of-Interest/ArtMID/19366/ArticleID/3300>
- Castañó Díaz, C. M. (2013). Defining and characterizing the concept of internet meme. *CES Psicología*, 6, 82–104. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S2011-30802013000200007
- Dam, R., & Siang, T. (2020). *What is design thinking and why is it so popular?* Interaction Design Foundation. Retrieved October 05, 2020, from <https://www.interaction-design.org/literature/article/what-is-design-thinking-and-why-is-it-so-popular>
- Foster, M. K. (2019). Design thinking: A creative approach to problem solving. *Management Teaching Review*. <https://doi.org/10.1177/2379298119871468>
- Gasser, M., Butler, A., Waddilove, L., & Tan R. (2004). Defining the profession of industrial-organizational psychology. *The Industrial Organizational Psychologist*, 42, 15–19.
- Islam, S., Lahti, K., & Chetta M. H. (2018). Research partnerships between academics and consulting firms: A stakeholder analysis. *Industrial and Organizational Psychology* 11(4), 596-605.
- Jimenez, W. P., Kath, L. M., Islam, S., & Schmidt, G. B. (2020). I-O can has meme? Using memes to engage others with I-O psychology content. *The Industrial-Organizational Psychologist*, 58. <https://www.siop.org/Research-Publications/Items-of-Interest/ArtMID/19366/ArticleID/4594>
- Kurtessis, J., Waters, S., Alonso, A., Jones, J., & Oppler, S. (2017). Traditional science–practice research in I-O: Are we missing the trees for the forest? *Industrial and Organizational Psychology*, 10(4), 570-576. doi:10.1017/iop.2017.57
- Lefkowitz, Joel. (2010). Industrial-organizational psychology's recurring identity crises: It's a values issue! *Industrial and Organizational Psychology* 3, 293-299. 10.1111/j.1754-9434.2010.01243.x.
- Nolan, K. P., Islam A., & Quartarone, M. (2014). The influence of vocational training on the brand images of organizational consultants. *Psychologist-Manager Journal*, 17, 245–278.
- Razzouk, R., & Shute, V. (2012). What is design thinking and why is it important? *Review of Educational Research*, 82(3), 330–348. <https://doi.org/10.3102/0034654312457429>
- Ryan, A. M. (2003). Defining ourselves: I–O psychology's identity quest. *The Industrial–Organizational Psychologist*, 41, 21–33.

Meet the SIOP Administrative Office Staff

The SIOP Administrative Office staff is a small but mighty group of professionals who handle a myriad of responsibilities. From member recruitment and engagement to conference and event management and helping the general public get their questions about I-O psychology answered, these 10 team members wear many hats. If you need help or have an idea, read on to find out which staffer can help. Want to know more about them? Visit <https://www.siop.org/About-SIOP/Staff>



Tracy L. Vanneman, CAE, Executive Director

In my 15-year association and nonprofit career, I have worked in sponsorship sales, event planning, governance, membership, volunteer management, fundraising, and communications. As executive director for SIOP, I lead a team of 9 talented staff members and manage the operational work of the Society. I also provide insight, information, and perspective to the Executive Board and committee leaders to partner with our volunteer workforce in pursuit of SIOP's mission. Although no 2 days are the same, I spend most of my working hours conversing with and assisting board leadership, advising and supporting staff, planning for upcoming events and initiatives, reading and writing reports and communications, analyzing financial data and legal documents, researching opportunities, and monitoring the external environment. I was honored to be selected as SIOP's executive director in April 2020, and I value the challenge inherent in the job (especially in these uncertain times). Even so, my most important responsibility is co-parenting my four children with my husband. Our family enjoys time spent together outdoors, playing sports, reading, and traveling. I am grateful to have fulfilling work that also permits a full life—a true benefit of working on behalf of I-O psychologists whose science and practice understands work-life needs so well!



Jenny Baker, Sr. Manager, Publications and Events

I've been part of the SIOP team for over 19 years, in various capacities. Currently, I am the senior manager of publications and events. My duties include working with *TIP* and *IOP* editors, proofreading and typesetting SIOP documents, handling logistics and print materials for the annual conference and the Leading Edge Consortium, and preparing documents for the SIOP Foundation. My favorite part of my job is attending the conference where I can see my SIOP friends and make new ones. I love being able to put faces with impressive names I see!



Scott Case, Business Process Manager

As the business process manager for SIOP, my responsibilities include interacting with our association management system vendor JL Systems, software configuration, software use and the troubleshooting of the software. I also work closely with project owners to understand document business process and project requirements and offer solution options. I also provide support to assist users with installs, updates, and training on current/new application systems. This also includes the creation of documentation for SIOP members. Prior to SIOP, I spent over 20 years in higher education.



Jamie Keblesh, Finance and Operations Manager

I have been at SIOP for almost a year now, and what an adventure this year has been! I am the finance and operations manager. I work on the SIOP financials, annual budget conference planning, awards, and Fellows. I also work with SIOP Foundation with their day-to-day operations and fundraising opportunities. My favorite part of my job is getting to help plan activities for the AO staff. We have gotten creative with ways to keep the communication going while working remotely and participating in team-building activities this year.



Larry Nader, IT Manager

In answering “What do I do at SIOP?” my first question might be “When?” I started with SIOP in 1998. There were three of us. Lee Hakel was the office manager (what is now executive director), and Esther Benitez was the membership manager. Our website was around 50 flat pages, mostly *TIP*. At that point all of us worked on everything. I handled the computer network, setup of all computers, and installations and troubleshooting of their programs (still do). I was the webmaster. With the tutelage of Milt Hakel, I became the master of the database. Everything we did involved paper forms. Conference submissions were mailed in triplicate and had to be delivered to our office by the deadline. Dues were mailed in. I used to spend early mornings running credit card numbers over the phone lines. Conference registrations were also mailed in and had to be manually entered into the database.

Our first online submission project was the development of JobNet, now called I-O Job Network. This was spurred on by the incredible amount of manual labor the Placement Center caused at the conference. Resumes and job ads had to be copied and bound into booklets overnight each day of the conference. JobNet proved to be a success, and we moved on to putting conference registration and dues online.

Now 22 years later, there are 10 of us. SIOP membership has more than tripled since I started. Our database is in the cloud with our membership management software. Our website has thousands of pages (still a lot of *TIP*). Social media rules. My job has evolved yet stayed the same. I still handle computers and the network for everyone. I continue to work on many aspects of SIOP. I work with the Program Committee for the conference. I interface with the AV for most of our events, including the conference. I am the voice that makes announcements at the conference plenaries.



Susan K. Rogers, CAE, Business Development Manager

I joined SIOP as manager of business development in late 2018 after moving to northern Ohio from Ypsilanti, Michigan. Previously, I worked in membership and marketing at the Society for Manufacturing Engineers (SME) in Dearborn, MI, and the Society for College and University Planning (SCUP) in Ann Arbor, MI. I graduated from Central Michigan University with a journalism degree, and I began my career in public relations at Washington University in St. Louis. I honed my marketing skills by promoting the executive programs and management seminars at the Executive Education Center in the School of Business at the University of Michigan. While I enjoy writing news and feature stories, I found marketing and sales to be more intellectually stimulating and challenging. As a result, I became a marketing professional who understands what makes a partnership valuable to an organization. I strive to create the kind of advertising, exhibiting, and sponsorship opportunities that help connect SIOP members with the right organization, product, or service when needed. I also manage the CE credit program and its relationship with APA, HRCI, and SHRM.



Barbara Ruland, Marketing and Brand Strategy Manager

Since I joined SIOP as a temporary staffer in 2016, I've had a whirlwind tour of duties related to communications, with two constant themes running throughout: video and data analytics. Beginning in early 2017, we started leveraging my extensive background in live and preproduced television broadcasting to create video marketing and information pieces for SIOP. I am passionate about the value of analytics to understand customers and inform marketing communications. I have been continuously expanding my capability for measuring and interpreting digital interactions to understand SIOP members and refine our communications and have helped other members of the staff learn these skills as well. This driving interest led me to enroll in the prestigious Integrated Marketing Communications master's program at Northwestern University's Medill School, and I expect to finish the 2-year program this spring.

I am currently the staff liaison for the Visibility Committee and handle much (though not all) of SIOP's email and other marketing activities. I also work with the executive director on member communications related to

governance and advocacy topics. My recent focus has included video infrastructure for the virtual SIOP conferences; launching the SIOP webinar series, including marketing and building out the web resources; and working to improve SIOP's online presence through content marketing initiatives such as the "Working Through Covid-19" resources and SEO (search engine marketing). What I love about working with SIOP is the way members use the scientific method to solve human challenges at work. I count myself fortunate to have had the opportunity to get to know several members and work with the amazing AO staff.



Amber Stark, Communications Manager

As SIOP's communications manager, I am primarily responsible for NewsBriefs, SIOP social media, and media relations.

- NewsBriefs, SIOP's weekly member e-newsletter, features important information about SIOP events and membership opportunities. NewsBriefs is often booked out weeks in advance, so please contact me as soon as you think you might have a placement request.
- SIOP has four active social media accounts: Facebook, Twitter, LinkedIn, and Instagram. Please reach out to discuss how we can use these platforms to share your information.
- Reporters regularly reach out to me for experts who can talk about various workplace topics; I also share SIOP information with the media. If you have questions about media relations, please let me know. If you've been interviewed by the media and would like to have that interview link shared on social media, please email it to me.

I have long-held interests in creative team leadership and employee well-being. One of the things I enjoy most about working at SIOP is learning about and sharing the work our members are doing in these and other important work areas!



Jayne Tegge, Member Engagement Manager

I have worked in membership services at SIOP for the last 6 years. My favorite part of the job is speaking with members and potential members in person and at events. I love finding the connections between my knowledge and what someone needs. As the member engagement manager, my job is to coordinate all membership activities including dues renewals, recruitment, membership materials, member benefits, and to improve member engagement with SIOP. I also direct SIOP's volunteer programs, including committee management, the online SIOP Volunteer System sign-ups, and training for SIOP's volunteer leaders.

Since working at SIOP I've developed the concept for the Conference Commons (Committee Zone), redesigned membership brochures and a new poster explaining I-O psychology, created the Sterling Circle to recognize long-term members, helped evolve the Membership Committee's efforts, especially in terms of data analytics, worked to upgrade member benefits and the website, developed advertising about membership, and implemented a new member onboarding program. I'm currently very excited about the data analytics and look forward to the membership dashboard, which is coming in the near future to the SIOP website.



Michelle Zavaleta, Member Relations Specialist

I've been working with SIOP for 2 years as the member relations specialist. My primary responsibility is responding to emails that come in through siop@siop.org and answering phone calls. Whether you're reaching out about picking a graduate program or needing help logging in to your SIOP account, I'll likely be the one who responds. This is my favorite part of the job because I have the chance to get to know members outside of SIOP's events. I am also responsible for managing the I-O Job Network, from writing promotional emails to assisting employers and job seekers with their questions. I take care of the annual reviews of the policies and procedures on the SIOP [governance page](#). This requires reading through the documents, then sending them to the respective committee chair for their edits. This ensures that SIOP's governing documents are always relevant to what committees are doing, so members can stay in the loop.

Members in the Media

Amber Stark

Awareness of I-O psychology has been on the rise thanks to articles written by and/or featuring our SIOP members. These are member media mentions found from Sept. 15, 2020, through Nov. 30, 2020. We scan the media on a regular basis but sometimes articles fall through our net. If we've missed your or a colleague's media mention, please send them to us! We push them on our social media and share them in this column, which you can use to find potential collaborators, spark ideas for research, and keep up with your fellow I-O practitioners.

Hiring

Irina Cozma on how to select candidates for the most important job in the country:

<https://medium.com/@irina.cozma/how-to-better-select-for-the-most-important-job-in-the-country-9671fb7727d>

Nicolas Roulin on how to land a job as companies shift toward virtual hiring: <https://idose.org/heres-how-to-land-a-job-as-companies-shift-towards-virtual-hiring/>

Ted Kinney on hiring during a recession: <https://www.recruiter.com/i/hiring-during-a-recession-3-ways-to-adapt-to-the-current-labor-market/>

COVID-19

Songqi Liu on whether 2020 will change the way you work forever:

<https://www.futurity.org/workplaces-covid-19-jobs-2439342/>

Ronald Riggio with five positives about remote COVID working: <https://idose.org/five-positives-about-remote-covid-working/>

Leadership and Management

Ronald Riggio on six important rules for new leaders: <https://idose.org/six-important-rules-for-new-leaders/>

Tomas Chamorro-Premuzic and **Lewis Garrad** on whether the future of work will expose incompetent leadership: <https://www.hrexaminer.com/will-the-future-of-work-expose-incompetent-leadership/>

John Ballard on a history of the creation of management studies' most famous symbol: Maslow's Pyramid: <https://medium.com/@ndisisnd/maslow-didnt-create-the-pyramid-391c285fc6c>

Health and Well-Being

Roni Reiter-Palmon on innovation, failure, and psychological safety: <https://pod.link/1446563591>

Cristina Banks on redesigning the office for the next 100-year flu: <https://www.npr.org/sections/health-shots/2020/09/14/909805060/redesigning-the-office-to-maximize-health>

Steve Kozlowski on the health effects of social isolation: <https://www.wlns.com/news/michigan/health-effects-of-social-isolation/>

David Shar on dealing with burnout in the workplace: <https://player.fm/series/drivethruhr-hr-conversations/dealing-with-burnout-in-the-workplace-w-david-shar>

David Shar on why you shouldn't always look on the bright side:
<https://www.fastcompany.com/90575887/why-looking-on-the-bright-side-is-overrated#IOPsych>

Technology

Gudela Grote on how job satisfaction decreases with digitization: <https://elexonic.com/2020/10/07/job-satisfaction-decreases-with-digitization/>

Cherie Curtis on using artificial intelligence the right way: <https://www.recruiter.com/i/using-artificial-intelligence-the-right-way-how-to-limit-the-risks-of-ai-driven-hiring/>

Diversity and Inclusion

Alexander Alonso and **Eden King** on how to turn inclusion research into action:
<https://www.shrm.org/ResourcesAndTools/hr-topics/behavioral-competencies/global-and-cultural-effectiveness/Pages/How-Do-You-Turn-Inclusion-Research-into-Action.aspx>

Remote Work

Shannon Marlow on team communication for the virtual workforce:
<https://www.utsa.edu/today/2020/10/story/marlow-studies-virtual-working.html>

Miscellaneous

Tomas Chamorro-Premuzic on four pieces of career advice it's okay to ignore:
<https://hbr.org/2020/10/4-pieces-of-career-advice-its-okay-to-ignore>

Cheryl Carr on seven subtle signs your coworkers are sabotaging your success:
<https://www.theladders.com/career-advice/7-subtle-signs-your-coworkers-are-sabotaging-your-success>

Marissa Shuffler on the resurrection of the office phone call: <https://newslnes.com/the-resurrection-of-the-office-phone-call/>

Membership Milestones

Jayne Tegge

New Sterling Circle Members

Caryn Block
Amy Conn
Guillermo Wated
George Yancey
David Youssefnia

New Pathway Member (upgraded from Associate)

Lorraine Dawson

New Professional Members

Lindsay Beers
Sora Jun
Jennifer Purdom
Shuang Ren
Simone Jacobi
Catherine Petrick
Joseph Griffith
Joel Bennett
Mahdiah Hajjar-Nejad
Russell Fitzpatrick
Darrien Batiste
Angela Russell
Rachel Herrick
Danyelle Johnson
Awaz Ahmed
Ariana Cunningham
Lisa Teegarden
Denise Tennant
Amy Emerson
Verena Haun
Sunni Lampasso
Rosa Salas
Christina Potvin
Leroy Simpson
William Vernon
Jill Sparacio
Jamie Smith
Regina Ogunsuyi
Vladimirk Klinksik
Lisa Hughes
Curt Bonafiglia
Abbe Warren
Natasha Winkler-Titus

Aaron Hill
Abhishek Sharma
Landyn Prescott-Miles
Dongseop Lee
Arik Cheshin
Sarah Coley
Roya Bauman
Ellen Peeters
Irina Mikhailova
Alina Gerlach
Brady Firth
Yanran Fang
Juanita Anderson
Maria Kakarika
Lakshmi Narayanan
Deanna Banks
Mayuri Duggirala
Ashley Wiscovitch
Albi Alikaj
Shanker Menon
Ho Shun Tse
Maureen Metcalf
Glenn Rupert
Josh White
Teresa Matos
Farja Lamia
Tamar Balkin
Sierra Lee
Emma Scalero
Lauren Hayano

I so enjoy being on the SIOP Membership Committee. It's a great way to see the wide variety of people who value our organization and are helping us pursue our collective mission.



Maura Mills
Associate Professor
SIOP Member since 2008

IOtas: Winter 2021

Jen Baker

Awards



Medtronic Chief Human Resources Officer [Carol Surface](#) has been named a [2020 National Academy of Human Resources Fellow](#) (NAHR) and was inducted during a virtual gala today, November 5. This honor is considered one of the most prestigious bestowed to HR leaders for their overall achievements and contributions to the advancement of HR.



Tammy D. Allen, University of South Florida, was named a 2020 AAAS Fellow for distinguished contributions to the field of psychology, particularly pioneering advancements in the nascent area of work-family interface, and developing theories, methodologies and tools.



Susan Mohammed, Nathan Bowling, Richard Landers, Peter Harms, Tara Behrend, and Christopher Barnes have been named Fellows in the Association for Psychological Science. These APS Fellows become part of a distinguished group of peers whose work has influenced the field of psychological science in important and lasting ways.

Books



Vanessa Barros has just published *Don't Mess With My Professionalism!* with foreword by Nobel Peace Prize winner O. Bouchamaoui. The book was recently picked as a top recommendation in the Harvard Business Publishing Education section.